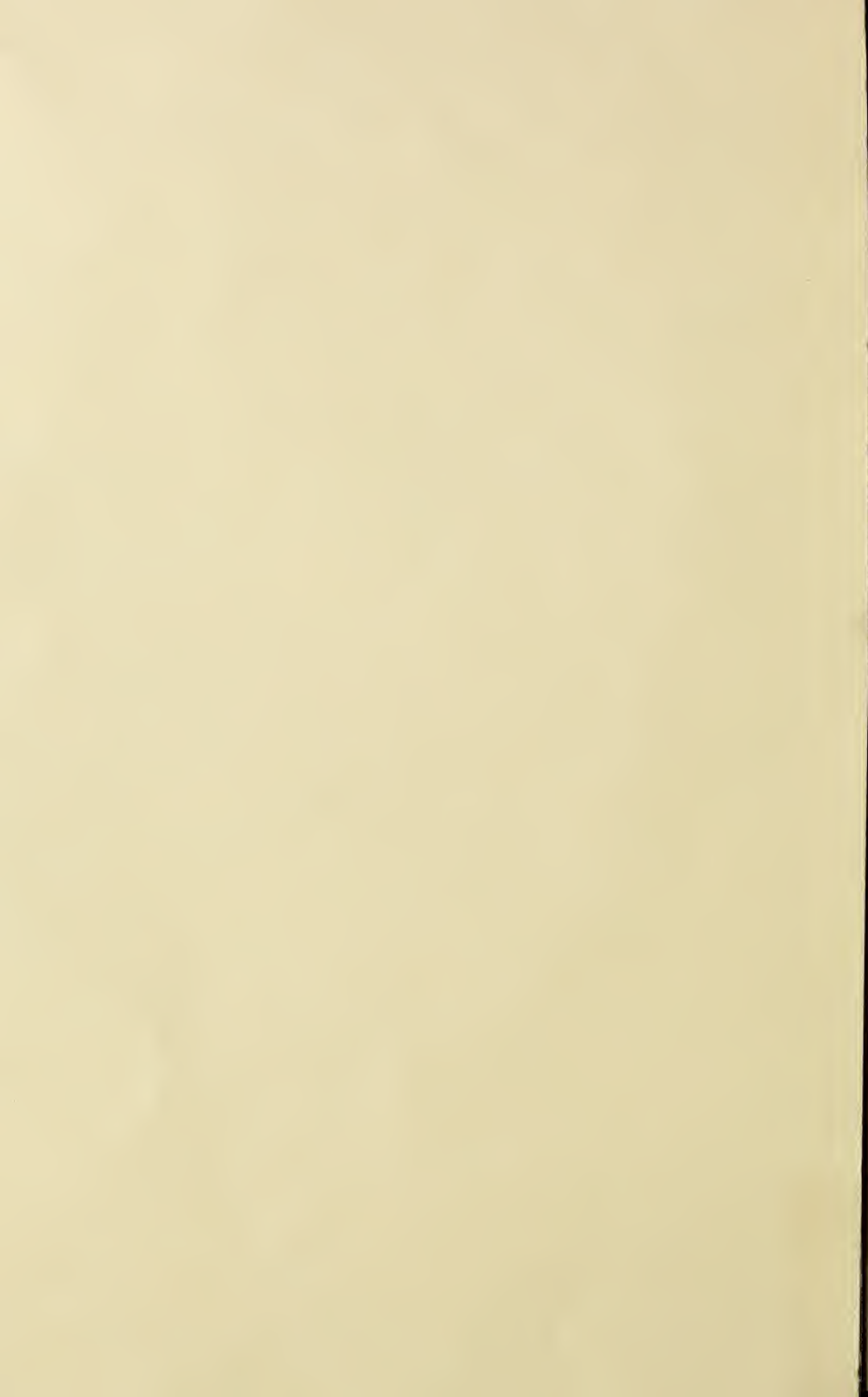


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# MARYLAND

DEVOTED TO  
AGRICULTURE, HORTICULTURE,



# FARMER:

LIVE STOCK  
and RURAL ECONOMY.

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BALTIMORE, JUNE, 1883.

No. 5.

For the Maryland Farmer.

## Free School Education, &c.

In my article upon the public schools, printed in the April number of the MARYLAND FARMER, I suggested that the elements of agriculture might be advantageously introduced into those schools, under the head of geography. This would not add a new branch of study to our already over-loaded course of public school instruction, only an expansion and a better mode of teaching an existing required branch. The branches required by law to be taught in our public schools are—reading, writing, arithmetic, history of the United States, grammar, geography and good behaviour. These are declared to be the necessary branches of public school instruction and are common to all. They are in most of the States called “common schools.” In ours, free public schools, the word “free” being used as an equivalent to common, making them common schools, like common roads are free and common to all the people. They are supported from a common fund, universal taxation, and teach or profess to teach common branches of study; that is branches of learning necessary and *common to all*. When the common road advances to the dignity of a turnpike, it ceases to be a *common* road; it is a special road, improved at the cost and expense of those desiring the improvement, and kept up by a toll exacted from all who use it. The law requires this, and custom and equity sanction it—so ought it to be with our common schools, whenever optional branches, such as algebra, natural philosophy, physiology, geometry, the Constitution of the United States and of Maryland, book-keeping, the laws of health, &c., are introduced, not necessary and common to all, like the

improved road it ought to be at the cost and expense of those receiving the advantage. Any other course would destroy the principle of equity and equality upon which the system is founded. It is like taxing one man for another's benefit. This principle has been violated by forcing the higher branches, for which provision has otherwise been made, as I shall presently show, into the common school, greatly to their injury, and greatly to the added cost of those schools. In place of these I would introduce the production of agriculture in teaching geography. Geography is universally admitted to be a dry study. Talk to a child about the latitude and longitude of Calcutta, the boundaries of States and the location of cities, there is nothing to interest him, but point him to the productions and you at once engage his attention. Take for example the State of Florida, a long tongue of low, level and sandy land, between 700 or 800 miles long by 80 or 100 broad, separating the Gulf of Mexico from the Atlantic ocean. This, from its peculiar shape, might possibly fasten its location upon the memory of some children, but tell him that Florida is the land of perpetual flowers, where frost never blights, where the sugar cane and the delicious oranges and the bananas grow, where the alligator and crocodile are to be found, and you will have no difficulty in fixing Florida, its location, boundaries and productions in the child's mind.

Take again, Norway, a rough, irregular and mountainous country, with continual snow upon their summits, and half the State subject to perpetual frost. There is not much here to attract or interest the child, but tell him that Norway is the land of the reindeer, where sleds and sleighs are drawn by these fleet footed animals, that vast quantities of cod and herring are tak-

en and packed upon its coasts, and that its inland streams abound with the beautiful salmon and the speckled trout, the delight of the angler and the fisherman, and you give the child something to think about. In this way a thousand other objects will suggest themselves to the teacher, and geography will become a profitable, pleasing and interesting study to both child and teacher. In the same way the geography of Europe and America may be studied, their different productions exchanged and sent from one to the other, by which industry is stimulated and commerce established. In this familiar way the child is instinctively led into the practical lessons of political economy, barter and sale, the value of exchanges, the use of ships, the founding of cities, the opening of canals, turnpikes and railroads, all the direct result of industry and labor applied to the productions of the soil. How much more profitable such a course of studies for our primary schools than Latin, Greek, French and Hebrew, or the fashionable sciences, such as philosophy, poetry, geology or biology. For these latter studies ample provision, as stated, is made in our colleges and academies, at an expense of upwards of \$50,000 in annual donations, and with a corps of teachers, professors and instructors, averaging one to every eight or ten pupils—where the primary schools are required to show an average of fifty pupils before a first assistant can be called in. How unjust, nay unreasonable to rob the little children just beginning to learn, of the time and attention so necessary for them, to teach what at best can be taught but imperfectly, when by the liberality of the Legislature so much better provision has been made for them in the endowed schools, academies and colleges scattered in almost every county of the State. To these are now added many free scholarships in the Johns Hopkins University.

A. B. DAVIS.

For the Maryland Farmer.

### Farming that Pays.

The prime requisite for profitable farming is *brains*. It is the thoughtful, foresighted farmer, who puts head work as well as hand work upon his lands, who succeeds best in the long run. The man who makes it a practice to get all he can from the soil, without recognizing the ne-

cessity of returning to it an equivalent, is the man who will soon find out that his soil is deteriorating and that farming does not pay. How can it? He takes away but does not replace; he pursues a starvation policy; he does not think the matter over; he is a *hand* working not a *head* working farmer.

The matter of thoroughly pulverizing the soil is an important consideration, as is also the proper application of fertilizers. More than ever our progressive farmers are considering what fertilizers are best adapted to their soils; they do not throw them on promiscuously, without studying the needs of the particular soil to which they are to be applied. Some soils need potash, others do not; some need phosphoric acid, others do not, and the only true way to ascertain just what *is* needed is by experiment. Try, on a small section of a field a certain fertilizer and note its effect; on another, try another kind and do the same, and in a short time the soil will let you know what it likes best. But to do this successfully one needs to understand the nature of his soil and the effect any given fertilizer will have upon it, and this is a matter for headwork more than hand work. It is such farming that pays.

CHARHEIM, N. Y.

J. W. D.

### Magnitude of our Farming Interests.

The solid wealth of the country, that which does not take wings to itself, is in the farming regions. The value of the farms in the United States, according to the census of 1880, was \$10,197,000,000. The live stock was worth \$1,500,000,000, and the farm products were valued at \$2,214,000,000. The farms, the stock, and the implements are the farmers' capital. Their aggregate value is four times the capital of the 254,000 industrial establishments of the United States, which is \$2,790,000,000. The bank capital of the country is less than \$500,000,000, and the aggregate cost of the railroads is put at about \$6,000,000,000. The value of the farms is therefore more than the cost of the railroads, the capital of the banks, and the capital engaged in mechanical industry, all combined. The farmers are, after all, the real millionaires.—*American Agriculturist*.

Why will you let your horses suffer from lameness when you can get Kendall's Spavin Cure? Read their advertisement.



### Farm Work for June.

This fruitful month is usually warm and blessed with good rains, which not only induces crops to grow and fruits to ripen, pastures to freshen and keep green, but such weather makes the weeds and grass grow in the garden and among the field crops almost as fast as it is cut down or covered up by plow and hoe, hence the industry and zeal of the farmer is taxed to the uttermost. Do not, therefore, relax your energies, but fight manfully from early morn, through the mid-day, until the dewy eve. This is the only way you can with assurance hope to have your toil rewarded by the fruition of large products.

#### Corn.

This crop should be now all up, thinned and growing well. It is to be hoped that it was not planted before the ground had been well prepared and highly manured, and that it is now clean of weeds, with the soil loose and friable by frequent workings with the cultivator. If so, give the crop a dressing broadcast of plaster at the rate of one bushel per acre. Corn does not require expensive nitrogenous manipulated fertilizers. Stable manure, ashes, plaster and South Carolina Rock with Kainit are said by successful corn growers to be the manures best suited to the corn plant. The soil about the corn should be stirred weekly by the cultivator—the iron cultivator is the best—not deep, but affording thorough level cultivation until it begins to tassel. It is not in this latitude too late to plant corn any time this month and expect a good crop, if on well-prepared, good soil, the corn has been well-soaked in strong brine and then rolled in plaster. During the soaking it should be well stirred and all the grains and litter that floats should be carefully skimmed and thrown away. If the sprouts of the grain are even two inches long, when planted they will grow all the sooner. Were the time earlier, we should advise the grains being soaked in some liquid with half a pint of tar to every four gallons of hot brine, and then rolled in plaster, but although the tar is a preventative against destruction by the birds, it retards the sprouting slightly of the grain we should, therefore, at this late period of the planting season, not use the tar, and besides, crows now have not the inducement to pull up the young corn that they had two months ago.

#### Pastures.

If it has not already been done, as it should have been long before this, sow one bushel of

plaster and three bushels of salt on each acre of your grass or pasture fields. Let the two be well mixed together or sow each separately as convenience may dictate.

#### Clover and Timothy.

Clover will certainly be ready to mow for hay this month. Cut it before the seeds are ripe. Do not let it get wet if possible, and put it under tight cover, with a little salt between the layers, and you can put in the mow or rick in a much greener state than if no salt was used. Should the orchard grass or timothy be advanced sufficiently this backward season to be in bloom, cut before the seed of either be more than half ripe. Great loss is sustained in the nutritious qualities of these valuable grasses, by being allowed to ripen their seeds and the stalks become woody. In forming and perfecting the seed, great exhaustion of the soil is suffered; hence the correct opinion of experienced farmers, that a crop of timothy allowed to ripen its seed, exhausts the land more than a heavy crop of wheat. Save all the hay you possible can, for what you cannot consume, you can always sell at a good price, but we would say the better policy is to sell no hay, unless it be a regular hay farm, but have enough stock to consume all the hay you can raise.

#### Potatoes.

This is a valuable crop and large quantities of seed should be planted. It is not too late to plant now—indeed, June is the time that our forefathers selected for planting this crop. See that the ground is rich and light by cultivation before planting. New land is best for this plant. Follow our hints and suggestions in regard to this crop in late previous numbers of the Maryland Farmer.

#### Root Crops.

We presume the Sugar Beet, Mangel Wurzel, &c., have all been sown and are up, if not try a small patch of each. Before the 20th of this month sow Ruta Baga seed according to our suggestions in our March number.

#### Tobacco.

We need scarcely say that the first seasons should be availed of by you after the plants are large enough to set them out on rich, well and thoroughly prepared ground. If you want a great crop of fine tobacco, let your land be like an "ash-heap," as the vulgar saying is, before you "plant." Be sure and plant no more area than is rich and nicely prepared, and which can be well attended to until it is ready for market. To make tobacco after the "old system" is

just throwing money, time and labor all away. The new order of things has affected no crop like it has tobacco. It seems that its culture and value has completely changed with the death of slavery. We are glad to say that appearances and reason bid us believe that good tobacco this season will bring unusually high prices, therefore we hope our planters who have such will take care to condition it and handle it well before pushing it upon the market. Nothing has hurt the sale of Maryland tobacco so much as the hurried way and imperfect state in which (often dire necessity compelled) our planters or late years rushed into market their tobacco crops. Wait until the sun of summer has by its hot breath given to it that sweet nutty aroma which so delights the buyer of the leaf and pleases so well the consumer of this renowned weed.

#### Harvest.

Let us warn you to prepare for harvest. Have everything ready when it comes, which it does sometimes very unexpectedly, forced rapidly into ripeness by hot suns and gentle rains. Make all your arrangements, extra hands engaged, reapers in order, &c., so that when harvest comes you will be ready for the pleasant fray.

#### Sheep Shearing.

Embrace the first warm, dry spell to clip the wool from your sheep. See to it in person yourself, that they be not abused or maltreated by the shears. Cull over your flock and by some mark, such as paint or other mark, those for the butcher or for sale can be easily distinguished. Separate the males from the ewes, and sell all the ram-lambs as soon as possible. Do not wean the ewe lambs, but give them and their mothers the best pasture possible. Dip all into tobacco water at the time of shearing. If the weather changes to cool, or it becomes stormy, be sure and house your sheep during its prevalence, or they will suffer, perhaps fatally, from loss of their warm coats. This caution should be observed for a month at least after shearing, so as to protect them from the ill effects of bad weather upon them under their suddenly changed condition.

#### Stock.

Let stock of all sorts have full sunshine, pure, clean water, good, sweet pasture, a plenty of shade, salt and ashes mixed, at command. Lambs should have access to ground oats where the older sheep cannot get and pigs have resorts to grain and swill where older hogs cannot reach.

#### Ensilage.

Some time this month prepare a piece of ground by plowing, good manuring or fertilizing

or with both, and drill in corn about 1 to 6 grains to the foot in the drill, the drills 3 feet apart. Cultivate well until it covers the space between the rows, and as soon as the shoots appear or begin to get into the roasting ear state, cut and cure as fodder corn, or cut it into fine short pieces and ensilage it. Peas, clover, oats, buckwheat, &c., are all good crops for ensilage. Corn is the best we think. It can be put in simple, deep, wide ditches and covered with earth as you would potatoes, &c., or, as is the fashion, it can be preserved in costly silos. All that is needed is weight to press out all air and keep out wet and air. This process gives to the stock green, succulent feed in winter, and is much relished by stock of all kinds as may well be supposed. Of course there is more waste on the outsides of the cheap silos than in the costly ones that are built in or close to the barns for convenient feeding in winter. But we would be well satisfied with the cheap, primitive silos, that our friend Mr. Morris, of Howard county, Md., recommends to all beginners, and it will be borne in mind Mr. Morris is the pioneer in America of this French system of preserving green substances for winter use of stock. He has continued to pursue the plan for years with great results in its favor. Let every farmer read about silos, of which the columns of the Maryland Farmer has been full often, since we were the first agricultural journal to give a full account of the French process, as far back as 1875, and to urge a trial of it in this country. May we urge our go-ahead farmers to try it this season on a small scale, for we are sure that it is destined to revolutionize the curing of clover hay at least in this country. Rain or shine, wet or dry, you can secure clover or other grasses like millet, peas and corn, which after being cut would be spoiled by a long rainy, cloudy spell, for curing into sweet hay or provender. One ton of ensilage will go as far in feeding stock as 800 pounds of good hay. But you get from 12 to 40 tons (depending on soil and season) per acre of green fodder corn as ensilage, when as cured fodder you would not get three tons. Ensilage with a little meal or bran makes rich food for milch cows, and is fine for hogs and fattening stock. Sheep and all stock become very fond of it and prefer it to the best timothy or clover hay.

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"Five Dr.'s: no end of medicine: no relief. Dr. Benson's Skin Cure has driven away all eruptions and I'm nearly well." Ida C. Young, Hamilton, Ill., Druggists keep it, \$1 per package.



## Garden Work for June.

This is the great grass-growing month and requires the constant attention of the gardener to keep down grass and weeds, and pay the other necessary attention to the many growing plants under his charge. There are also many seeds to be sown and plants to set out this fruitful month. It may be literally called the *garden month*, for unless the garden, or truck-patch, receive that attention this month, which it so imperiously requires, there will be little hope of enjoying the fruits of labor expended on a well managed garden, which, of all the spots on a farm, yields more profit, health and comfort, added to luxury, than any other. Every one who values the varied enjoyments of fresh vegetables, will, above all things, endeavor to have a good garden. It furnishes half, or more, of the family living. A small plot in town or village well managed as a vegetable garden would afford great pleasure and profit, and save much annoyance and expense. And yet it must be confessed that it is sadly neglected by many of our largest land owners. How often do we hear men, who labor under the false delusion, say "it is cheaper to buy most of our finest vegetables than to raise them." These are the same parties whose tables are never graced with anything but potatoes, field-corn, cabbage and perhaps tomatoes, unless they have been to market and brought home some stale vegetables at high prices because they were grown in the far away South or extreme North. This is all wrong, and our men of wealth who live in the country are to blame for it. If they give a dinner, their money has loaded the table with articles produced a thousand miles away and so withered that they are tasteless and unwholesome, when at little or no cost, they could have been grown at home, and been fresh, toothful and healthful.

*Cabbage*.—Set out plants; and if not already done, sow seeds of the late varieties at once, on a rich border, for winter cabbages. American Improved Drum-head Savoy, and Flat Dutch are best. The first is equal to cauliflower.

*Beans*.—Sow a few rows at intervals of the Wax Snap Beans.

*Early Sugar Corn*.—For succession plant early Minnesota, Crosby's Early, Hyde's Egyptian and Mammoth Sugar. These will be amply sufficient in variety and successive times of maturity, as named, even if all are planted at same time, although it would be better to plant as named about 5 days apart. If only one of the earliest sorts are used, plant 14 days apart.

*Martynia*.—A curious looking vegetable for sweet pickles. Plant and cultivate as cucumbers. Gather the fruit when tender and half grown.

*Burr-Cucumber*.—A beautiful little burr-like cucumber, and makes elegant, firm pickles, much liked. Plant the last of the month and treat as cucumbers.

*Egg Plant*.—If not set out before, put out the plants 3 feet by 2, on a slight hill, over a rich lump of manure, or in very rich, mellow soil. It is a delightful vegetable and growing yearly in popularity. It is a nice breakfast dish when well cooked, as broiled like a steak, or fried in batter, or egg and bread crumbs.

*Peas*.—Sow at intervals some rows of Champion of England peas.

*Asparagus Beds*.—Keep clean of weeds and grass

*Leeks and Eschalots*.—May now be planted out in rich, well prepared beds.

*Brocoli and Cauliflower*.—Set out plants after a rain or when the earth is moist. No use to try and grow either of these delicious vegetables except upon a very rich soil, spaded or plowed deep and well pulverized. Never let them suffer for water. 50 or 100 plants of each will be an abundance for an ordinary family. Set plants 3 by 2 feet.

*Celery*.—Be sure and have plenty of celery plants. Boston market or Henderson's Red are the best. Set out next month. Some can be set now for early use. This is growing to be an important necessity for the health of rheumatic people and dyspeptics, the doctors say. As a luxury, no one who owns a garden should be without it.

*Onion Seed*.—Not too late to sow onion seed for small pickling onions and sets for another year.

*Mustard and Cress*.—Sow, at short intervals, seeds of mustard—white—and cress, for salading. The two used together is very nice. Sow thick, cover half an inch deep—water daily, and cut it when young and tender. It is very wholesome at meals.

*Seeds*.—During the month, several garden vegetables will perfect their seed. No seed ought to be saved, except from the best specimens of the respective plants. As the seed bearing heads develop, prune off the inferior pods or seed bags, and the weaker branches, as also the tips, except the top ones. Many disappointments arise from sowing or planting seed that are too old to germinate. When seeds are gathered, after good drying in the shade, they ought to be put in

paper bags, or secured in some way, labeled and dated.

When properly saved and kept dry, cucumber seeds will retain vitality for 6 years; melon, 6; squash, 6; beets, 4; tomato, 5; turnip, 4; cabbage, 4; lettuce, 3; radish, 3; beans, 2; carrot, 2; sweet corn, 2; peas, 2; onion, 1; parsnips, 1.

It is true most of these seeds will vegetate after a longer time, but it is safest not to plant or sow either of them after the periods above named for each.

*Okra*—Plant at once, if not already done, some Okra, in drills 3 feet apart and 12 to 20 inches in the drill. Cultivate as you would early corn.

*Peppers*—Set out pepper plants on rich, well-prepared ground. Water freely until well-rooted. Set the plants 18 by 12 inches apart. Keep the different varieties well away from each other or they will quickly hybridize and by intermixture be neither one or the other variety improved, but deteriorated.

*Beets*—Sow some seeds of the Long Blood Red Beet, for winter use.

*Lettuce*—Set out some plants and sow seeds of the Coss sorts for a summer succession.

*Nasturtiums*—Plant at once some Nasturtium seed, 2 inches deep in poor, light soil. The blossoms make a nice breakfast relish—good appetizers. Pick the seeds as soon as fully developed or even formed, drop in vinegar with strips of horse-radish and a blade or so of mace, and they will be found equal to capers, with mutton, or as a pickle alone they are nice.

*Small Salading of all kinds*—Sow every week or ten days, small beds of the several sorts

## Raising German Carp.

The small fry can be transported in milk cans or other suitable vessels. They may be kept in tubs or barrels of water a short time after their arrival, but it is desirable to have a pond in readiness for them. The German carp will live in water that is somewhat impure, but with little doubt they will thrive best in water that is nearly pure. A small natural lake that is free from other kinds of fish or from those kinds that will devour them, is suitable for carp. An artificial pond can often be prepared for them with little cost. It should be in the main from three to four feet deep; and should contain several deep holes for the accommodation of the fish during cold weather. The fish are not active during the winter, but lie in a sort of dormant state, covered, or partly covered in the mud. The pond should contain a few islands and should have part of the water shaded by flat rocks or plank extending from the banks. It is also desirable to plant some trees on the banks of the pond and on the islands. The carp pond can be easily made attractive as well as useful.

The pond can be supplied with water drawn from a stream through a pipe, or can be filled by water issuing from a spring or raised from a well by means of a wind pump. An artesian well will supply sufficient water for several carp ponds. Provision should be made for letting the water out of the pond after it had become somewhat dirty, and for preventing the fish from escaping with it. One can commence the business of raising carp with quite a small pond, and can make additions to it as his stock increases. As soon as he begins to raise fish from eggs, one pond will be desirable for the young fish and another for those that are more mature. The two ponds may be connected, the water going over a slight fall in passing from one to the other. Care must be taken to keep minks and muskrats away from the ponds. The fish will eat nearly all kinds of animal and vegetable matter that pigs will. They will derive considerable benefit from grass, cress and other vegetables that will grow on the banks of the pond. They will also eat clover, cabbage, celery and many other kinds of garden vegetables. Fresh curds, blood and chopped liver are all excellent kinds of food for young carp as well as for

THE public domain of the United States which once embraced 1,823,000,000 acres, is now introduced to 1,000,000,000. Of this, deducting Alaska's swamps and mountain regions, the available arable land does not exceed 250,000,000. Of this, railroads claim one-half in addition to the large share already awarded them of 823,000,000 acres already disposed of. These claims are many of them based upon grants made for roads which have not been completed, and in some cases, of which the first rail has never been laid. Large blocks of land are lying idle, reserved under grants which have long been voided, but which the experience of the roads in dealing with the land officers, leads them to regard as already their own.—*Farmers' Review.*



those of larger growth. Most of the leavings of the table will be readily devoured by carp. The large fish will eat all kinds of grain after they are boiled. In feeding them care must be taken not to give them so much of any article which passes into decay easily that the water will become foul in consequence. The fish are the reverse of "gamy." They will rarely bite at a hook, however temptingly baited, but must be taken from the water by means of a dip net.—*Chicago Times*.

Humus is a general name applied to the partially decomposed vegetable matter embracing that contained in peat and muck, and as well as that resulting from the decay of green crops turned under. Its value as well as the rapidity of the decomposition, depends upon the kind of vegetable matter which is formed. Its beneficial effects upon soils are due principally to its mechanical action in stiffening sandy and loosening clay soils; in its absorptive and retentive power for moisture and ammonia; in its solvent power in rendering available mineral substances in the soil; and in supplying small amounts of plant food liberated by the process of decomposition. The principal element evolved from humus is carbonic acid.

At the Wisconsin Experiment Station last season, three and one-sixth acres of sorghum were planted, with the following results:

Weight of stripped cane,	75,262 lbs.
Per cent. of cane sugar in juice,	9.89 "
Per cent. of glucose in juice,	3.95 "

Amount of sugar separated:

First crystallization,	2,116½ "
Second crystallization	730 "

Total amount of sugar,	2,846½ "
Syrup drained from the sugar,	315 gallons.
Seed obtained, 76 bushels,	51 pounds each.

The cost of manufacturing the unrefined sugar, including cost of cane, was 4½ cents per pound. The value of the seed is not taken into account. The sugar is a good article nearly white, coarse grained and dry, and is in all respects equal to the best sugar made from Southern cane.

"Dr. Benson's Celery and Chamomile Pills for the cure of Neuralgia are a success." Dr. G. P. Holman, Christianburg, Va. 50 cts. at druggists.

## Spreading Manure Broadcast.

"Manure from the yard or stable" says Prof. Johnson, "rarely contains such an amount of volatile fertilizing matter as should deter from spreading it broadcast on the surface when most convenient. Unless manure is very rich as from grain-fed animals, and is in an active state of fermentation, hot and smoking, and exhales a distinct smell of hartshorn, there can be no loss from exposure, and in any case the loss will be less by spreading over thinly than by dropping in small heaps, because spreading means cooling and loss of fermentation. But manure when properly handled, need not suffer any waste from evaporation. A moderate and regulated heating of fresh manure results in the formation of humic acid, which secures the ammonia from loss by evaporation. This moderate heating it should have before hauling out, or in cold weather before it heats at all. The advantages of spreading the manure from the wagon as it is drawn out are, a saving of labor and an even distribution of the soluble salts (ammonia, potash, phosphates, &c.) in the soil by rain. If the manure is heaped on the field and gets a heavy rain before spreading, the ground under the heaps receives an undue share of the best part of the manure. Independently, however, of loss by evaporation, there may be circumstances when it is best to get the manure into the ground before it has had a chance to become dry, for it distributes much better when moist and swollen with water than when 'chippy' or 'snuffy' in texture, and is ready at once to act as manure, whereas dry manure must recover moisture before it can be of any use."

## How to Exterminate Sorrel.

Many farmers are greatly troubled with a growth of sorrel upon their lands, which is an indication of neglect and exhausted fertility. The weed, however, appears upon land in good tilth in seasons when extreme drought prevails, or upon silicious dry ridges. The best way to exterminate the pest is to sow bone dust mixed with ashes and plaster. One barrel of raw bone dust, with two of ashes and half a barrel of plaster will serve to drive out the sorrel on a quarter of an acre of ground, if applied after deep ploughing.

## Oats and Peas as a Forage and Hay Crop.

We clip from the *Union*, of Balto. Co., Md., part of a practical communication by F. S. to that paper. The suggestions are excellent and should be tried by our farmers. It is rather late now, but not positively too late, and an acre or so may be well risked as an experiment this year. If a success, then next year it can be followed up more extensively with assurance of success by an earlier sowing.

"Two years ago I sowed and harvested some 4 acres of oats, cut for hay in the milk, which yielded 12 large wagon loads of splendid hay, but not having the means of weighing, cannot say how many tons they were, but we estimated as near as we could after the mow settled at 20 tons. This hay was fed to milk cows and to horses. It was eaten with avidity and the cows yielded largely of good rich milk, and that with only 2 quarts of corn chop daily to each.

"Last year I plowed up a heavy run-out sod, manured it with 6 large wagon loads of rich manure (made from fattening cattle) per acre, harrowed and cross-harrowed it, and made it very nice and mellow. I then sowed 1½ bushels of Canada field peas per acre, shoveled it in and then harrowed it level. I then drilled 4 bushels of oats and using 300 pounds of blood and bone per acre. The ground was then rolled. The crop was put in the last week in April and the piece was not quite 5 acres.

"The yield was very heavy and it was a source of amazement to every one who saw it. It was fed green to cows, to hogs, and in the greatest abundance. Before the oats were out of the milk it was cut and cured as hay, and this winter by having it, I was enabled to sell some ten tons of hay more than I could have spared without it.

"My oats and peas are now up and growing finely, but it is not too late to sow. If you want an abundance of good feed, either green or dry, try an acre or two. Put the ground in good order, make it rich and put on plenty of seed and you will be delighted with the yield. Your stock will thrive upon it wonderfully and the milk will be rich and produce first quality of butter.

"I grow and use large quantities of corn fodder, but oat and peas will compare favorably with any forage crop I ever grew. Don't forget the old farm crops; only give them a fair trial and the result will be satisfactory. F. S.

### More new Uses for Cotton.

It is said it has been demonstrated that fire and water-proof houses can be built out of cotton and straw. The cotton used is the refuse of the plantations and factories, and when ground in about an equal amount of straw and asbestos, is converted into a paste, and subsequently into large slabs or bricks which become as hard as stone. The article thus made is pronounced the best of architectural material and will be much used. A Boston rope maker, of long experience, like the father before him, says that cotton rope can be made for fifty per cent. less than hemp, and is preferable for all shipping uses, cables, bolt, rope, halyards, tow ropes, hawser, tackle and falls, hoisting, &c. He also says that cotton is superior to hemp for caulking, and believes that it can be used for roofing and as a substitute for leather and rubber in hose and belting, and for tubing to enclose telegraph and telephone wires, both over head and under ground. He states that one hundred and fifty tons of hemp rope is made in the United States daily, the material for which is mostly imported. Congress has authorized the Secretary of the Navy to introduce cotton cordage into the navy service of the United States, to such an extent as will fully test its value and efficiency, as compared with the kinds now in use.

### RAINIT.

This useful ingredient of the compost pile may now be obtained from all leading dealers in fertilizers. It is mined at Strassfurt, Prussia; its composition is as follows:

Sulphate of potassa.....	28 to 32 per ct.
Sulphate of Magnesia.....	14 to 20 per ct.
Chloride of Magnesium.....	4 to 5 per ct.
Sulphate of Lime.....	10 to 12 per ct.
Chloride of Sodium (common salt).....	35 to 40 per ct.

This deposit was struck at a depth of from 480 to 812 feet. The thickness of the bed is still unknown, though it has been pierced over 1,000 feet. It extends over an area of twenty-five German miles in length.

### Potash in Plants.

Sir J. B. Lawes, of Rothamsted, England, has recently given some interesting statements of results of experiments with potash upon the growth of barley. It does not need to be said that potash in one or more of its many forms is an important element in plant nutrition. Dr. Lawes has experimented with barley on the same plots for 30 years. One plot has received a given amount of phosphoric acid and salts of ammonia, while an adjoining plot received, in addition to these, a liberal supply of potash amounting to 3,300 pounds for the 30 years.

From time to time the grain and straw have been analyzed, and while there is but little difference in the chemical composition of the grain, there is a remarkable difference in the straw. The potash in the ash of straw from the plot receiving potash has increased nearly three per cent. and now constitutes one-third of the whole ash, while that in the ashes of the other plot not supplied with potash, it is only eight per cent. There has also been a decrease in the amount of straw produced, during the last years of the experiment from 400 to 500 pounds per acre. Thus, the straw on "unpotashed" plot contained 8 pounds of potash per acre, while the other yielded 44 pounds.

The amounts of grain produced upon the two plots have remained nearly the same, showing that the straw is the first to suffer. How long this will continue, time alone can show.

Soil analyses show that potash has constantly accumulated in the soil, receiving a yearly application, because the crop grown is one requiring but a small amount of this substance. If crops requiring large amounts of potash were grown, the difference in the crops on the two plots would doubtless be far more striking.

SIXTY-FIVE millions of acres will probably be planted in corn, in this country, within the next six weeks. At the usual estimate of four quarts per acre, this will require 8,125,000 bushels for seed.

**Devi: Among Cats** is a new discovery, and is wonderful in its destruction of Rats, Mice, Roaches, and vermin of all kind. 10 cent boxes at all stores.

### The Pulse of Animals.

In horses the pulse at rest beats forty times, in an ox from fifty to fifty-five, and in sheep and pigs about seventy to eighty beats per minute. It may be felt wherever a large artery crosses a bone, for instance. It is generally examined in the horse, on the cord which crosses over the bone of the lower jaw in front of its curved position, or in the bony ridge above the eye; and in cattle, over the middle of the first rib, and in sheep by placing the hand on the left side, where the beating of the heart may be felt. Any material variation of the pulse from the figures given above may be considered a sign of disease. If rapid, hard and full, it is an indication of high fever or inflammation; if rapid, small and weak, low fever, loss of blood, or weakness. If slow, the probabilities point to brain disease, and if irregular, to heart troubles. This is one of the principal and sure tests of the health of an animal.

### That Husband of Mine

Is three times the man he was before he began "Wells' Health Renewer." \$1. Druggists.

### Ensilaging Corn Stover.

Last year I had 4½ acres of the yellow northern corn, (planted in drills,) from which I pulled 450 bushels of ears, and immediately after gathered the stalks and cut them in ¾ inch lengths into my silo. I am much pleased with the result. The cows and calves eat the ensilage in preference to good hay and do well on it, although there had been two hard freezes before the stalks were gathered, and the leaves were dry and withered. The ensilage cost me about \$1 a ton (40 cubic feet) in the silo. I do not think the fodder could have been preserved in any way more cheaply. —S. C. C. in *Country Gentleman*.

FROM the Agricultural Department at Washington, we find that the average price of corn in the United States for 117 years, from 1871 to 1881, inclusive, appears to be about forty-three cents a bushel. The highest annual average was sixty-four cents in 1874, whilst the lowest was thirty-one cents in 1878. The aggregate value of the crop has increased in ten years from \$445,000,000 to \$759,000,000, though the last crop was the smallest for the past seven years.



#### Chemical Action of Fertilizers.

A direct supply of plant food does not fully explain the action of manures. Many fertilizers operate indirectly to feed crops by their chemical effects upon the soil. Thus barnyard manure in undergoing decomposition yields a supply of carbonic acid which may yet act on the mineral constituents of the soil and liberate its elements. Many mineral elements also, such as common salt, plaster of Paris and other saline matters, may react on the soil, converting potash and magnesia, for instance, into soluble forms, and thus giving the same result as would follow an immediate use of the last named substances.

Taking Indian corn as the basis for comparison, we learn that 100 pounds of corn is equal in nutriment to 45 pounds of peas; 83 pounds of wheat; 83 pounds of oats; 90 pounds of rye; 111 pounds of barley; 153 pounds of pea vines; 333 pounds of corn stalks; 460 pounds of oat straw; 500 pounds of Irish potatoes; 625 pounds of rutabagas; 666 pounds of rye straw; 907 pounds of beets, and 1,250 pounds of white turnips.—*Pennsylvania Farmer.*

#### Department of Agriculture.

The Department of Agriculture has issued Report No. 56, which contains several matters of interest. It gives the latest information on farm animals in this country which is statistically of great interest. Their aggregate value is estimated at \$2,338,197,968. The number of horses is 10,838,111; of mules, 1,871,079; of milch cows, 13,125,685; of other cattle, 28,046,077; of sheep, 49,237,291, and of swine, 43,270,086. The average real value of horses per head is \$70.59; of mules, \$79.49; of milch cows, \$30.21; of other cattle \$21.80; of sheep, \$2.53; of swine, \$6.75. The agricultural census of last year showed that Great Britain had 5,807,491 cattle; 24,319,768 sheep, and 2,500,402 swine. This is indeed a great and growing country, and agriculture is the cause of its prosperity.

When your only and beloved son comes home scarred up as the result of a juvenile fight, apply Kendall's Spavin Cure, and the pain will cease and the intellect will be greatly strengthened and in all probability he will soon be in the White House. Read advertisement.

## THE APIARY.

### Bees on the Farm.

We have often heard people say, "I mean to have some bees, and I meant to have had them long before this." Yet these persons live, year after year, without them, while their fruit bloom is poorly fertilized, and the nectar secreted in the flora of their fields and hedges is left to waste its sweetness. Bees seem especially designed, in the economy of nature, to gather up the remnants "that nothing be lost." This was forcibly illustrated the past season, by the reports coming in from different parts of the country of the large yields of honey gathered from wheat stubble. When the wheat was cut, before the straw was fully ripened, a sweet juice oozed out of the straw where it was cut; in some instances the juice was so plentiful that a clear drop of juice ran out of every stubble, and some filled the upper joints and ran down the stubble.

It is a very rare season indeed that bees cannot secure enough honey from some source to support themselves. We have many times been despondent, thinking that we would get no surplus, and have to feed our bees their winter store when, all at once, there would come a flood of nectar from some unlooked for source. A cool wet spring and summer will produce no honey, although the bloom may be abundant, and yet it may be just the condition suitable to produce many honey-yielding tall flowers. During the last autumn a large amount of surplus honey was gathered from the different varieties of smart-weed (*Polygonum*). This honey was beautifully white, and of a fine minty flavor. These plants flourish on overlands and damp lands generally, although they are found abundantly in this locality, growing in corn fields, and where early potatoes have been raised.

Sweet corn is growing in favor as a honey plant. A sweet syrup is secreted in the axils of the leaves, near the stalk, and bees gather pollen from the tassel.

It is surprising that farmers will go to town and buy miserable glocus syrup, when a heaven-born sweet syrup can be had at their doors, "not for the asking but for the taking."—*Mrs. L. Harrison, in Rocky Mt. Rural.*

BEEs are always excited by quick motions about their hives, writes the editor of the *Western Farmer*. I received many a sting as a reminder of the importance of quiet movements when handling the combs or in any way manipulating hives. Don't jar the combs as you lift them out of the hive, and handle them slowly and deliberately. Leave all your fussy, nervous motions out of the apiary. That is no place for them. If a bee flies about you, don't jerk away from it or strike at it. If it buzzes around your face, hold your hands up and shield your face. But my advice to all who are in great dread of being stung is to wear a black net veil. Use a little smoke (with a smoker) to quiet them when necessary, but always be gentle.

THE Langstroth hive, in some form, is used by two-thirds of the progressive beekeepers of this country. This hive was patented Oct. 5. 1852—over thirty years ago—and although there may be others just as good, there are none better. The requisites for a good hive are durability, simplicity, ease of construction and of working, and pleasing to the eye. The Langstroth embodies these. Its inventor was the father of modern bee-culture, who gave to the world the movable frame. Without its use we might as well keep our bees in hollow logs, as our fathers did. The patent has expired, and is now free to all.—*Prairie Farmer*.

## HORTICULTURAL.

### The Grape as an Arbor Vine.

A great many people fail in some things to derive, at once, beauty utility and profit from the same thing. As a case in point I would mention the substitution of the grapevine for the ivy, morning glory, running rose and similar climbers, when used as a screen or a covering for an arbor. I would not indeed wholly discard the morning glory and other beautiful climbers. Far from it. But in village and city places where space is necessarily limited and a vine is desired for a screen or arbor covering, or for the verandah, then I should recommend the planting of grapevines for the purpose, for they are the hardiest of all vines, and usually in two years from

planting they not only produce an abundant and grateful shade, but produce the most esteemed of all small fruits. The Concord is a grape easily and cheaply obtained from all nurserymen; it is hardy, and one of the most tractable of plants; produces a heavy forage that appears and clings to the vines as long as a warm temperature makes a shade desirable. There are other grapes quite as good as the Concord (and some a good deal better) but none that is more certain to succeed under all conditions of management.

Some may say that while they should like to have a grapevine or two, yet they have not the room or a proper place for them. Well, let us see about this. At some point where it is desirable to have a screen, though of a few feet only, to cut off the view from the street, how easy to set a couple of posts, attach four wires, set one or two grapevines, and in time have a neat screen, and at the proper season from ten to fifty pounds of the luscious fruit! And along the fence or wall in the back yard, (and the front one too,) even if the sunshine smiles upon it only half of the day, a hardy grapevine will thrive and yield fruit.

The grapevine may also be used to cover the sides of old buildings or walls, or trained upon fences instead of upon a properly constructed trellis.

Remember you can produce a display of flowers in the house, or in a small space out of doors; but a grapevine needs considerable room, and will well repay you in affording a grateful shade and delicious fruit.—*L. D. Snook, in N. Y. Examiner*.

A NOVEL STRAWBERRY BED.—The California correspondent of the *Baltimore Sun* speaks of a "new, self tending strawberry bed, it is the invention of a Californian. Fill with earth any sort of barrel that has been bored well all round with inch holes. Plant strawberries in every hole and in the open top, root downwards and top outwards. It is a great success. It is quite ornate and will keep for several months in bearing. Every child can have a keg, or several can cultivate a half-barrel in common, besides industry and economy, to say nothing of fun and health."



### Bean Culture.

We call attention to what Mr. Harris, a well known Northern farmer and writer says in regard to bean culture in his section. If it be so profitable a crop there, why should it not be equally so in the Southern States? In Maryland, we have the best of soil for this crop, and now that our planters are gradually getting into the system of diversified crops and no longer make or break upon the one grand specialty—tobacco—why should they not try on a small scale, say *one* acre, the bean. Now is just the time, or any time this month in Maryland is time enough to grow a well matured crop of beans, if the directions of Mr. Harris are followed. Try an acre and keep account of all expenses, and amount of sale of crop, which account will tell the producer, whether it be a profitable crop or not. Nothing can be lost by the experiment, as the crop surely will more than pay all the expense of the test.

"I live in the greatest bean growing section of the world. Some of our farmers grow beans by the hundred acres, and on nearly all farms it is a regular crop. In proportion to the time and labor required, no ordinary farm crop, on the average, affords larger profits per acre. Time was, when people thought that beans required poor land. Our farmers do not find it so. Beans are now grown on our best and cleanest wheat soil. If beans are grown on stubble land, or after roots or potatoes, or sowed corn, it is of the greatest importance that the land should be clean. For this purpose nothing is better than sowed corn. I have had beans growing side by side, in the same field, part of which were on land which had been planted to potatoes the previous year, and part after corn fodder, sown in rows and cultivated. The beans after corn were not only a better crop, but the labor of hoeing and pulling was far less than after potatoes. It is no use trying to raise beans unless you are prepared to give them the cleanest and best of culture. The most profitable crop of beans I ever raised was on sod land plowed the first week in June, thoroughly harrowed and

rolled, and the beans drilled in the rows two feet five inches apart, dropping five or six beans in a place a foot apart in the row. All the labor performed on the place was to cultivate it two or three times between the rows, and to chop out any weeds that came up between the beans in the row. On stubble land more hand hoeing is required, but whether less or more, the success of the bean grower largely depends on keeping the crop free from weeds. Those who have had no experience in the cultivation of beans as a farm crop would do well to select a piece of dry, warm, sandy land, plow it carefully and harrow it thoroughly, and roll it till the land is smooth and level. Then, with a common marker, mark off rows two feet and a half apart, and drop five or six beans in a place a foot apart in the row. Cover the beans about an inch deep by drawing a little fine soil on top of them with a hoe and patting down the hills smooth and firm with the back of the hoe. As soon as the beans appear, go through between the rows with a cultivator, and in a week or less, cultivate them again, and follow with hand hoes to remove any weeds that may appear in the rows. The time of planting in this section is from the 1st to the 20th of June. I plant my beans as soon as I can get the land ready, after I am through planting corn. In regard to the best varieties for this section, I know of nothing better than the medium bean, Boston marrow or White Mountain, pea bean and white kidney or royal dwarf. These are all white beans and there is nothing better either for market or for home use."

JOSEPH HARRIS.

—It will benefit an orchard to plow the ground, but it should be plowed very lightly, to avoid breaking the roots. Pruning the trees is necessary for the production of good fruit, but with all the care possible in this way there will be no good fruit unless the codling moths are destroyed in some way. One way is to pick up all the fallen apples and feed them or burn them. Another is to set life-traps in the orchard at nights, or to have fires or smudge heaps among the trees; but in some way these insects must be destroyed or there will be no good fruit. It is a good plan to keep fowls in the orchard and leave the ground under the trees loose for them to scratch in and hunt these worms.—*N. Y. Times.*



### Culture of the Peanut.

It is not many years since the peanut plant began to assume proportions as a staple Southern crop, and even now the area of its cultivation, though annually extending, is confined to comparatively narrow limits. In Virginia, it is cultivated only in portions of five or six counties on the south side of James river, the counties of the Isle of Wight and Surry being the only ones where it is grown in every part. Light sandy lands near the rivers and smaller streams of eastern Virginia are suited to this crop; and as lime and marl are easily procured in all this region, the peanut eventually became a leading product. The annual crop of Virginia is now two million bushels.

One of the first questions a prudent farmer asks, when thinking of a new crop is, does it draw heavily upon the soil? At first, fears were entertained that such would be the case with the peanut, but a decade's experience has shown that the farms of Tidewater Virginia, where the peanut has been grown annually for twelve or fifteen years, have improved in fertility, and that many of them are worth fifty to one hundred per cent. more now than in 1870. This improvement is not due to the peanut plant in itself, but to the fact that the grower is obliged to manure his land more and till it better. It is a plant that requires the application of both vegetable matter and marl or lime, when these elements are not amply present. In this respect alone the peanut has been of incalculable benefit; and as it is now found that it does not greatly exhaust the soil, it is fast becoming a favorite crop and taking precedence of every other. Many growers say that the leaves alone, which either fall from the plant before digging or are then detached, will, for a number of years compensate for the elements of plant food taken away in the peanut itself; and that if all the vines are returned to the land, either before or after going to the cattle pen, they will not only restore the loss but leave the soil richer than at first. It is found that woods' litter applied to the land once in four or five years, and small dressings of lime or marl, are the best of all manures for the peanut. Where these elements are present in liberal quantity, the yield per acre is from fifty to seventy-five

or one hundred bushels of peanuts. A good deal depends upon the mechanical condition of the land. A light and dry porous soil is most favorable. Standing water and cold wet soils are destructive. Tenacious lands are not only difficult to work but wasteful in the quantity of peanuts that are left in ground when digging the crop.

The cultivation of the peanut does not interfere seriously with other staple crops, as with improved implements and rapid work, the times of working them may be so ordered as to leave intervals for attention to other things. In ordinary seasons, three weedings with the hoes are amply sufficient, and frequently two are enough. The tendency now is to cultivate more with the plow and cultivator and less with hoes. As the fertilizer, where any is used, is generally applied at planting time, there is nothing to do in summer but to plow and hoe the crop. As soon as the young peanuts begin to form to much extent, working ceases and the crop is laid by. There is then an interval of at least two months, when the planter can turn his attention to other matters about the ground.—*American Agriculturist*.

### Hungarian Grass and Hay.

Hungarian grass is yearly growing in favor with dairymen and stock-growers as a valuable substitute for hay as a winter feed, and in the place of, or in connection with fodder corn for soiling in mid-summer, or whenever grass fails from drouth. The largest varieties are best but all are valuable. It will flourish in any good corn land, but a sandy loam suits it best. If properly managed it will produce more food value to the acre than meadow on the same land would do. Four tons of cured grass to the acre is no uncommon yield. The average quantity of seed to the acre is half a bushel, but some sow more and others less. The time for sowing is not till permanent hot or summer weather sets in—from June 1st to the middle of July. It is emphatically a hot weather plant, and sowing should always be delayed till frosts are all out of the way. It has a fine seed and special preparation of the ground is required or its minute roots and leaves dry up and perish if a ready and strong hold of the soil is not obtained.

A very fine tilth is absolutely essential to its successful growth. There is no use sowing it on cold and wet ground, nor on ground that is dry, hard and lumpy. On such ground the seed will not be likely to come up at all, and if it does, it will perish in its early growth and leave the ground free to the hardier weeds which will follow it. On light, fine and rich soil it makes a quick and heavy growth. The value of the crop for fodder depends very much on the time of cutting. If left standing till the seed begins to fill it becomes so full of woody fibre as to make it harsh to the mouths and stomachs of animals and greatly to reduce its value. It is most profitably cut for fodder when the heads are well started out, but before they get their full size, and certainly before blossoming. If left till blossoms are out, it will be past its prime and will quickly become as worthless as straw. When cut thus early it is an unusually rich fodder and makes excellent milk, butter and flesh. It is one of the best crops grown to mix with fodder corn for ensilage.—*Prof. L. B. Arnold.*

#### Evaporation of Fruit.

The following by Amos Stauffer, of Waynesboro, Pa., was read before the 3rd National Agricultural Convention, Chicago, December, 1882:

"The best method of increasing the value of our domestic fruits, as I comprehend it, consists in familiarizing our farming community with the simplicity and cheapness of the evaporating process, and convincing them that it is a legitimate, profitable and easy adjunct of farm or household labor. Evaporated fruit is worth from 200 to 400 per cent. advance over the same fruit, sun or oven dried, the labor of preparing fruit (which is the greatest item) being the same in both cases. The actual cost per pound of product, without regard to quality or value when prepared is about the same. Briefly stated, our farmers' wives, sons and daughters now exchange the product of our orchards, with their labor added, at a discount of from 30 to 400 per cent. below the product of the less intelligent colored laborer in the tropics. At the village store, or warehouses of the metropolis of the West, the unequal exchange is daily made; two or three pounds of dried apples go for one pound of figs,

dates, currants, raisins, or prunes, while our dried peach in exchange is scarcely at par. That our domestic fruits in themselves are superior to those of the antipodes needs no farther argument than a comparison of daily quotations between our evaporated fruits and those offered by the tropics.

Every pound of evaporated apples offered, has a value in Chicago, equal to two pounds of tropical dried fruits, while evaporated peaches readily command from 3 to 4 pounds of currants, figs, dates, raisins, or prunes, etc., thus practically reversing the old customs and values."

#### Cucumbers without a Garden.

The method by which an old lady managed to have a supply of cucumbers from her back yard may afford a useful hint to others whose garden area is limited. A cask was placed in the corner and partly, perhaps one-third, filled with stones and a thick layer of stable manure, and upon this, six or eight inches of soil. Two small boards tacked together to form a trough were placed against the side of the cask and extended from its top to the bottom. The seeds were sown in the soil, and the washing water was poured in through the trough to keep the soil moist. The vines in time ran over and covered the sides of the cask, and some were trained along the fence. They bore in a manner seldom seen in the usual method of growing cucumbers.—*American Agriculturist.*

[The above is not new, but useful, many persons with small spaces of ground at their disposal can grow a lot of nice vegetables if they would. Cucumbers, tomatoes and grapes can be easily grown in abundance, for a small family, alongside a division fence or a neighbor's wall. But how few ever think of having these home luxuries fresh from the vine? We know an humble workman, who, thinking of his "fatherland," rears every year splendid grapes, both white and dark colored, in full abundance for his family and friends in a very contracted space. He utilizes the division fences and walls of his circumscribed lot for this purpose, and by these artificial protections he grows grapes that would grace a rich man's conservatory.]



### Corn Tests.

Mr. Lazenby, director of the Ohio Agricultural Experiment Station, says:

"In all samples where it was known from what part of the ears they were taken, the germination was carefully watched and compared. From this it was found that the kernels from the *butts* of the ears almost invariably produced the strongest radical, and those from the *middles* next.

Of the samples in which the kernels were from the *tips* of the ears, an average of 70.3 per cent. sprouted; of those from the *middles* of the ears only 58.2 per cent sprouted; those from the *butts* did best, 76.1 per cent having sprouted.

Forty of the tests were of the "Leaming;" which gave better results on the whole than most of the other varieties. Of the forty tests an average of 67.4 per cent sprouted, varying from 0 in the poorest sample, to 100 per cent in the best. The poorer was from corn harvested before fully ripened and left in the shock over winter; and one that sprouted 100 per cent was from the same crop, but husked and dried in the fall. In the samples of Leaming, those from the *tips* of the ears gave an average of 72.6 per cent sprouted; those from the *middles*, an average of 66.7 per cent sprouted; those from the *butts* an average of 79.1 per cent sprouted.

In the samples reported as taken from the bin or crib, or having remained in the shock over winter, an average of only 45.6 per cent sprouted; while on the other hand, of that selected in the fall and dried or kept from severe freezings, an average of 89 per cent sprouted. The corn that showed the greatest vitality was sent to the station by J. Newton berry, Belmont county, O. Of 100 grains tested, all sprouted within forty-eight hours, and only two produced weak radicals.

A variety should not be condemned simply from the fact that the seed from last year's crop was killed by severe freezing or other causes. Eighty-two of the samples tested were dent corn; three were flint, and six were sweet corn. The flint varieties are undoubtedly the most hardy."

### Go ged Livers and Gall,

Biliousness, headache, dyspepsia, constipation, cured by "Wells' May Apple Pills." 10 and 25c.

### Light and Dark Colored Seeds.

Dr. Sturtevant, director of the New York Agricultural Experiment Station, at Geneva, N. Y., in his bulletin No. 39, April 14th ult., states:

"In packets of various seeds as collected from the plant, and as sold by seedsmen, there will be observed two colors or shades so that with little difficulty these seeds can be sorted into two classes, the light colored and the dark colored. A few weighings of these sortings have been made, with the uniform result so far as tried, of heavier weight to the dark colored seeds.

"Some of these seeds have been germinated in our apparatus, and it has been found that in general the dark colored seeds have given a larger per cent. of seeds that germinate than do the light colored seeds.

"We may conclude, hence, from this data it is probable that dark colored seeds of these varieties are superior in vitality to the light colored seeds. Whether however these dark colored seeds are better for crop must be determined by experiments upon growth. There seems a certain correlation between seed and quality, so that in a general way we may assert that as quality of our edibles improve the seed diminishes in number and vitality. There are, however, some apparent exceptions to this, and we cannot yet accept this statement as a proved law of growth, but only as a probable one."

GARDEN CULTURE OF THE STRAWBERRY.—Col. Wilder is of opinion that for garden culture, planting in rows three feet apart, and one foot apart in the rows, allowing each to make from two to four shoulder runners, and no more for the first season, is best. These, by autumn, will make a row of thrifty, strong bearing plants, and will produce more than the common matted row. For field culture, the rows should be four feet apart and the plants one foot in the row, and all superfluous runners should be pinched off so as to leave only strong plants. It may be added that it is found by experience that a renovation by replanting young ones every second year is good practice. For garden culture we should plant a young bed every second year to succeed the older one.—*Gardener's Monthly*.



Thirty-five years ago, tomatoes put up in tin cans for future consumption were an unknown luxury. Last year it is estimated from reliable statistics, that 53,332,952 cans of this wholesome and popular product were prepared in the United States, the bulk of the business being done in Maryland and Virginia, and more than one-half found its way to Europe.

ENDIVE is one of the best salads for fall and winter use. Sow for an early spring, about the middle of April. As it is used mostly in the fall months, the main sowing are made in June and July, from which plantations are formed at one foot each way, in August and September. It requires no special soil or manure, and after planting is kept clear of weeds until the plant has attained its full size, when the process of blanching begins. This effected by gathering up the leaves and tying them by their tips in a conical form with bass matting. This excludes the light and air from the inner leaves, which, in course of from three to six weeks, according to the temperature at the time, become blanched. Another and simpler method consists in covering up the plants as they grow, with slats or boards which serve the same purpose by excluding the light, as the tying up.

## THE DAIRY.

### Keeping Butter.

A correspondent asks us to give a method for keeping butter for winter use. Messrs. Willard and Arnold's plans are among the best. Mr. Willard states that he knows for a certainty, having tested it, that good butter put up after the following direction will keep in sound condition one year. Use for a package a tub somewhat tapering, with heavy staves and heads provided at both ends, so as to make a package that will not leak. In packing the tub is turned on the small end, and a sack of cotton cloth is made to fit the tub, and into this the butter is packed until it reaches to within an inch of the groove for holding the upper head. A cloth is next laid on the butter and the edges of the sack brought over this and neatly pressed down, then the head is put in its place and the hoops driven home. The package is now turned

upon the large end and the sack of butter drops down leaving a space on the sides and top. Strong brine is then poured into a hole in the small end and until it will float the butter. The hole is tightly corked and the butter is pretty effectually excluded from the air. Where only a small quantity of butter is to be preserved, L. B. Arnold advises packing it in self-sealing fruit-jars. By this plan a little brine is put into the jar which is then packed not quite full of granulated butter. Some bleached muslin is then laid over the butter, then the little place above filled with salt, and finally enough strong brine, made from butter salt, poured in to fill the can. Mr. Willard advises when packing roll butter in jars that the brine be made strong enough to bear an egg. To three gallons of this brine he suggests adding a quarter of a pound of white sugar and one tablespoonful of saltpeter. Boil the brine and when it is cool strain carefully. Make the butter into rolls and wrap each roll separately in white muslin cloth. Pack the jar full, weight the butter down and submerge in brine—*Western Rural*.

### Extra Summer Food for Dairy Cows.

If the amount of pasture for the herd is at all scanty, or the soil is sandy or such as will be likely to fail from drought early, some early crop will be necessary to meet the emergency in time. A piece of clover makes the earliest feed and is one of the very best soiling crops where nothing has been previously prepared. It may be fed wilted or dry, with better effect than when entirely green, both on account of the effect upon the milk and upon the welfare of the herd. If the farm happens not to be supplied with a good piece of clover, a piece of barley sown as early as possible may meet an emergency for early soiling. Peas and oats—two of oats and one of peas—sown a little later than the barley will follow up the succession advantageously, than which there is nothing better for soiling milch cows; and any surplus which is not needed for summer use, will, if cut, when green; make the best of winter feed. It is a most excellent plan for any dairyman, whether he has need of it as a substitute for grass or not, to raise a good supply of peas and oats, to cut green and cure for the use of his cows, as they leave grass in the fall and change to dry feed. Green

peas, and oats well dried and preserved, make a very rich and well balanced ration, and one that is admirably calculated to keep up the yield of milk, and the flesh and strength of cows as they change from green food to dry, or at any other time in the foddering season. Where pasturage is plenty and the soil moist or of a character that will hold moisture well, a necessity for very early soiling crops may not be required, and a crop of fodder corn may come forward early enough to meet any deficiency from the parching up of the pastures. Corn is the favorite crop for late soiling, on account of its being easy to raise, and a sure crop, but chiefly because of the enormous amount of fodder which will grow upon a given area of ground. Where grass constitutes a part of the feed, corn makes a most excellent supplement. Like green clover, it is better fed wilted than entirely green. When fed immediately after cutting it is too sappy and wet for making the best quality of milk, and the cows do not like it so well, nor will they do as well upon the green as upon the wilted fodder.—*National Live Stock Journal, Chicago.*

**CURRYING COWS.**—It is claimed by the advocate of cow currying that it cleanses the hide of superfluous hair, keeps it active and healthful, and void of that peculiar odor so commonly found in milk and sometimes in butter; that it promotes the secretion and disposition of the putrid particles of the animal system, which would otherwise be absorbed by the secretory glands and be carried off in the milk, and leaves the latter not only purer, but much better, and gives promise to the butter maker of a higher color and a purer flavor to the butter from the churn, hence a higher price in market.

**MILLETT:**—*The American Farmer of Indiana*, says: "Cows are exceedingly fond of millet and it is an excellent milk producing fodder. It should be grown in light sandy soil, at least it is more thrifty on such soil. By manuring it will produce five tons to the acre after being cured. The hay should be slightly moistened and sprinkled with a little corn meal before being fed.

### Bran and Meal.

Bran is a most excellent feed for cows, and some of those who have experimented with a view of ascertaining its relative value have demonstrated to their own satisfaction that they can obtain more milk from feeding bran than from an equal value of any other ground food. Its value must be reckoned in some general way like this in order that all may be benefited by what may be said upon the subject. With the partial exception of raising calves and the last stages of fattening, bran may be regarded as an economical and most excellent food. The bran of wheat contains a large proportion of the protein-bearing cells of the grain and consequently it is rich in protein. The average composition of bran is as follows: ash, 4.31; protein, 14.28; crude fibre, 7.20; nitrogen free extract, 69.00; fat, 3.91. The chief value of the grains, as another writer remarks—except where very concentrated food is required, lies in the albuminoid which they contain, since the non nitrogenous nutrients can be more cheaply supplied in roots and coarse fodder. But bran, which is cheaper than the grains, contains the albuminoids in very-much larger proportion, and hence its superior value. Bran also has a very beneficial mechanical effect, which we believe to be pretty nearly if not quite as valuable as its other characteristics. It ought to be fed mixed with cut fodder.—*Western Rural.*

**BERKSHIRE SALES.**—Mr. E. R. Dennis of Howard county has sold his entire stock of spring Berkshire pigs. Among the purchasers of those sold in Maryland, are G. B. Goldsborough of Easton, J. E. White of Anne Arundel county, J. W. Dorsey, New Market, and J. L. Hammer-sla, Hagerstown. Mr Dennis breeds from the best strains—Bella Donna and Smithersin stock.

WE are much indebted to the Hon. Robt. McLane for his valuable presentation of two volumes of the "Compendium of the Tenth Census." We shall in the future draw from this authentic source, many statistical facts of importance and interest to our many farmer readers.

# MARYLAND FARMER

## A STANDARD MAGAZINE,

DEVOTED TO

Agriculture, Live Stock and Rural Economy.

EZRA WHITMAN, Editor,

COL. W. W. W. BOWIE, Associate Editor,

141 WEST PRATT STREET,

BALTIMORE, MD.

BALTIMORE, JUNE 1st, 1883.

### TERMS OF SUBSCRIPTION

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Advertisements to secure insertion in the ensuing month should be sent in by the 20th of the month.

COL. D. S. CURTIS, of Washington, D. C., is authorized to act as Correspondent and Agent to receive subscriptions and advertisements for the MARYLAND FARMER, in the District of Columbia Maryland and Virginia.

Our friends can do us a good turn by mentioning the MARYLAND FARMER to their neighbors, and suggesting to them to subscribe for it.

Subscribe at once to the Maryland Farmer and get the cream of agricultural knowledge.

NOTEWORTHY EXAMPLES.—As some evidence of the esteem in which the MARYLAND FARMER is held by practical farmers in different States, we may be pardoned for gratefully acknowledging the fact that one mail last month brought us payments for small arrearages and subscriptions in advance, from G. F. B., a subscriber in Missouri, up to 1889; one from R. A. N., Macon, Ga., to 1886, and M. A. C., from Virginia, to 1886. Also the assurance on renewing his subscription, of Hon. A. K., of Maryland, that "your valuable paper is worth five times its cost."

We thank that popular Southern journal, the *Ishmaelite*, published in Sparta, Ga., for the following kind notice:

"THE MARYLAND FARMER.—The March number of this most excellent journal is on our table. It is full of interesting and instructive reading. The agricultural, horticultural, poultry, apiary, dairy live stock and ladies departments are each presided over by experienced hands. Some of the best writers in the country are numbered among its contributors. It is now in its 26th year of existence, and is published at the low price of \$1 00 a year. It is a handsome magazine and is worth much more than is asked for it. Write for specimen copy or, what is better, send \$1 00 and get it one year. Address, Maryland Farmer, Baltimore, Md."

That sterling old paper, *Frederick Examiner* says of our last number:

THE MARYLAND FARMER.—The May number of this favorite agricultural magazine has been received. It contains an address delivered by the President of the Agricultural College of Maryland, which no doubt will be found very interesting reading by our farmer friends. There will also be found in its pages many useful suggestions to farmers and gardeners. We would say to our agricultural friends, who do not already subscribe, that this is a good time to subscribe. Address Ezra Whitman, Baltimore, Md. Terms \$1.00 per annum."

EARLY OATS.—Our friend, Mr. A. L. T. D. sent us a specimen of oats, pulled up on 10th of May, in a field in Gloucester Co., Va., fully 2 feet 6 inches high, and well headed out. The kind of oats was not stated. It appears to have tillered largely and shows great vigor and productiveness.



#### The Inspection of Cattle.

The Maryland Improved Live Stock Breeders' Association met at the Carrollton on the 9th ultimo, with the President, Mr. John G. Clarke, of Baltimore county in the chair; Mr. Alexander M. Fulford of Harford county, secretary. Mr. Whitridge of the committee who had been appointed to wait upon Governor Hamilton with reference to a rigid examination of the herds of cattle in the State by the State Veterinary Surgeon, reported that they had performed their duty, and the Governor was present to speak for himself. The Governor said he was willing to do anything in his power according to law to secure thorough inspection of cattle and prevention of disease, and in the appointment of officers he would know no politics, but only the best man for the place. Collector Webster said he held the same views as the Governor with reference to the importance of obtaining the best man to be the United States veterinary for the new quarantine farm on the Baltimore and Ohio Railroad, which he stated was almost completed, and invited the members to visit it with him during the afternoon. Messrs. Charles K. Harrison, of Baltimore county; Col. E. H. Webster, of Harford county; Adam R. Magraw, of Cecil county; Frederick B. Steiner, of Anne Arundel county; Dr. J. W. Downey, of Frederick county; Wm. T. Johns, of Montgomery county; E. R. Dennis, of Howard county; Dr. W. H. De Courcy, of Queen Anne's county; Dr. I. L. Adkins, of Talbot county, and John L. Ripple, of Washington county, were elected vice-presidents. Upon motion of Mr. T. Alex. Seth, it was decided to appoint a standing committee on the prevention and suppression of contagious diseases among cattle. This association of stock breeders have taken "the bull by the horns" and we hope pleuro-pneumonia and all other contagious and infectious diseases will be subdued and our State forever rid of the sus-

picion of having diseased cattle. This association is one that will, we are sure, result in great benefit to its members and the ultimate prosperity of the State. We rejoice to see the interest taken in it by the prominent stock breeders, and we hope the number of members will continue to increase until it becomes a power for good in our State. Every breeder of improved stock should become a member.

#### Hon. A. Bowie Davis.

The Public School Teachers' Association, of Montgomery county at its meeting in Rockville, on the 11th ultimo, presented this gentleman, as an evidence of their high esteem, with an elegantly bound bible, after which Mr. Davis delivered an elaborate address on "Common School Education in this State," evincing great research and much practical and solid wisdom. In this number will be found a very interesting communication to the MARYLAND FARMER on the same subject, by the same venerable friend to education of the whole people as it was intended by the original promoters of the system. We heartily concur in Mr. Davis' views and have long deplored the continual inroad made upon the usefulness of what was intended to be a blessing to the masses, but by injudicious innovations has descended into absolute wrong to the poor, and opened the door to wasteful expenditures of money. This subject, we think, is closely allied to agriculture, for it is the farmer at last who supports the government, and from his labor comes the money to support a lavish expenditure that is now diverted from its legitimate uses to give a smattering of education in the *higher branches* to those who are independent, and should not be allowed to elbow the needy out of the paths of common sense and solid learning.

#### Catarrh of the Bladder.

Stinging, irritation, inflammation, all kidney and urinary complaints, cured by "Buchu-paiba." \$1

WE deeply regret to be informed of the death of our valued correspondent, Mr. W. W. Woodruff, Sr., of Griffin, Ga. About ten years ago he established the "Woodruff Fruit Farm" which he has left behind as his great living monument. He was really the pioneer of practical fruit farming in Georgia, and his example did more toward the growing of fruit in this great State than that of any other man. His success in this branch of industry, together with his writings, have given to his county—Spalding—her widespread fame as a fruit growing section and salubrious climate and to the State an impetus in this direction that has poured with continuous wealth into her coffers, and added greatly to the individual prosperity and welfare of her people.

THANKS to the officers of the Santa Fe Tertio-Millennial Anniversary Association, for a complimentary ticket. The anniversary celebration intends to include a comprehensive exposition of the Mining and Industrial expose of the Rocky Mountain region, and to be held at Santa Fe, New Mexico, July 2nd to August 3rd, 1883. It will present the characteristics of the three civilizations which have occupied New Mexico and the adjacent territory since its first occupation by the Spaniards in 1550, to the present time, and illustrate the progress of the several centuries.

SUCH of our friends as may be card collectors, by enclosing to J. C. Ayer & Co., Lowell, Mass., a three cent stamp will receive such a variety of handsome fancy cards as they may have on hand. They are prettily gotten up and worthy of albums kept to show the spirit of the times.

ZIMMERMAN FRUIT EVAPORATOR.—See advertisement of the Zimmerman Fruit Evaporator in our advertising columns this month. All fruit and vegetable growers are interested in a machine that will accomplish what is claimed for this.

REX MAGNUS.—The Humiston Food Preservative, it seems has been severely tested by Prof. Samuel E. Johnson, of Yale College, and his trials of this extraordinary discovery go to show that the following assertion of the company which manufacture this preservative is true, however wonderful.

"*Rex Magnus*, recollect, is, in its use, a healthful, tasteless, cheap food preservative and a perfect and reliable substitute for ice, heat, sugar or alcohol. It preserves, sweetens, and makes tender any kind of beef, pork, veal or mutton, and that too, regardless of climate, heat, cold, or any unfavorable surrounding. It also preserves poultry, fish, oysters, game, butter, lard, tallow, milk, eggs, beer, cider, wine, fluid extracts, vegetables, juices, hams, shoulders, roasting ears or green corn on the ear, etc., etc."

If experience prove these statements true, and we cannot doubt them, what a wonderful blessing it will be to our country friends and all who desire to keep fresh food safely without ice, by the expensive use of which perishable articles often decay, and must be used directly that they are taken from the ice or they perish the more quickly.

THE ENGLISH SPARROW.—It was strongly argued before the West Chester Microscopical Society, that the English sparrow is a very great nuisance, and a resolution was passed asking that the members of our Legislature urge the repeal of all laws that prevents the destruction of those birds. We recognize this move as one in the right direction and hope our next Legislature will remove the blot which protects these villainous enemies of the farmer, fruit grower and gardener, and of our beautiful singing birds and the house wrens. We literally hate the English sparrow and would like to see "the small boy" legally let loose upon them.

Don't Die in the House.

"Rough on Rats" Clears out rats, mice, roaches, bed-bugs, flies, ants, moles, chipmunks, gophers, &c.

## POULTRY HOUSE.

### What is the Best Food for Young Chicks?

What Fannie Field says in *Ohio Farmer*: "The first meal, which should not be given until the chicks are at least twelve hours old,—hard-boiled egg, crumbled fine, or stale wheat bread crumbs moistened with milk. We make it a rule to feed nothing the first week except the egg, bread crumbs and curds. When a week old we begin on cooked oat meal, boiled potatoes, cooked rice, etc. Cooked corn meal may be fed the second week, but we think they do better without any corn meal until the third or fourth week; then we give almost any cooked food, adding a little cooked meat when the egg is dropped from the bill of fare, unless insects are plenty. As soon as they are old enough to swallow the grains, give cracked corn, cracked oats, wheat, etc., at night. Two or three times a week mix a little bone meal with the feed—a tablespoonful to a pint of feed. Season the food slightly with salt and pepper. Give milk to drink if you can get it. Feed often—five or six times a day. Feed all they will eat up clean, but do not leave any food around to sour. Sour, sloppy food is responsible for a good deal of mortality among the infant chicken population."

When you set the hens scatter sulphur, snuff, tobacco, or insect powder, in the nests, and again about ten days before the chicks are due dust the feathers of the hen well with sulphur or insect powder, and the chicks will come from the nests free from lice; then put them in a clean coop, give the mother hens a chance to dust themselves, and the chicks will not be troubled with lice. For young chicks that are troubled with lice there is nothing better than a mixture of sweet oil and carbolic acid—1 part of acid to 100 of oil.

Geese seldom lay the second clutch of eggs in a season, and care should thus be taken to gather the eggs while fresh and put them carefully away where they will not get cracked or disturbed until the goose is ready to set.

Never feed your fowls damaged grains or tainted food. See that the water they drink is clean and good.

### The Egg Trade.

The magnitude of the trade in eggs is scarcely appreciated even by farmers themselves. Thousands of packages are received weekly in our large cities and towns; and the supply of fresh specimens is far below the demand, at least, during eight months of the year. To illustrate the enormous totals of the trade in eggs and its value to the farmer, we take the estimates for the single State of Ohio. In round numbers, Ohio has 200,000 farms. Upon each of these farms it is safe to say there will be found an average of a dozen fowls, or 2,400,000 for the State. If 2,000,000 of these are hens, and they yield but sixty eggs during the season, there should be an annual production of 120,000,000 eggs or 10,000,000 dozen, worth at the low price of ten cents per dozen a round million dollars. If to this be added the value of the poultry consumed at home and sold in the markets, say \$500,000 more, the aggregate would show a sum equal in value to that of the total production of rye and barley together, the produce of 77,000 acres of land, one-third as great as the value of the potato crop, more than one-half that of cheese, about one-quarter that of wool and about the same as the crop of clover seed. From the statistics of this State only, it is easy to approximate the importance of this industry to the whole country.—*Ex.*

THE egg is considered one of the best of remedies for dysentery. Beaten up slightly, with or without sugar, and swallowed at a gulp, it tends, by its emollient qualities, to lessen the inflammation of the stomach and intestines, and by forming a transient coating on these organs, to enable nature to resume her healthy sway over a diseased body. Two, or at the most three egg per day would be all that is required in ordinary cases; and since egg is not merely medicine but food as well, the lighter the diet otherwise and the quieter the patient is kept, the more certain and rapid is the recovery.—*Housekeeper.*

Fish oil or tanner's oil, will effectually rid your chickens of lice and vermin. Put a good coating on the roosts and the work is done.

### Mother Swan's Worm Syrup.

Infalible, tasteless, harmless, cathartic; for feverishness, restlessness, worms, constipation. 25c.



## OUR LETTER BOX.

In answer to our enquiry as to the prospect of the peach crop on the Eastern Shore, our esteemed correspondent in reply, suggests a somewhat new theory which seems to be confirmed by experience and observation. He writes:

"So far there seems to have been nothing that has injured the crop; the wood is in a healthy state, and the trees had a full bloom, and the indications are that we will have a full crop. But we know nothing certain until after the "June fall."

"The theory has been advanced that the *greatest damage* is done to the peach in autumn and not in spring. That is, should heavy frosts strike the trees before they shed their leaves, the buds are certain to be injured, but this injury does not prevent the buds blooming just as freely as they would do if they were not hurt; nor does it even prevent the formation of the fruit, those peaches formed from frosted buds do not mature, they will turn black at the stone and fall to the ground in June. After the time for this "fall" we can give some idea of the expected crop, but not until then."

E. B. E.

"I have a field of fallow wheat that I don't know what is the matter with it. It came up all alike and very well, and was looking finely until about four weeks ago, and after that time in spots it has almost ceased to grow, and those spots have a yellowish cast; the spots are about the size of a dining table and larger. I should think it was from the wet weather, but the land is well drained, thrown up in eight feet lands and some of the spots are on top of the lands, while the wheat in the furrow is green. I used on the wheat last fall South Carolina Rock; about three to four hundred lbs. to the acre. You will please answer through the columns of your valuable paper, the "MARYLAND FARMER," whether it is the acid in the manure or not, and oblige a subscriber.

WM. S. COPPAGE."

[We do not think it is owing to the acid in the manure, but to other causes, perhaps to excess of wet below the roots of the plants. Land is not always well-drained

although it appears so to the eye. Excess of moisture will make wheat and other crops in their young state turn yellow. Will be glad to hear how the yellow spots turn out at harvest.—Eds. Md. Far.]

## Publications Received.

GOFF'S HAND-BOOK OF READY REFERENCE FOR ADVERTISERS, 150 Nassau street, New York City. It will be a good adviser to advertisers, as to the best section and paper in that section to advertise their goods, stock, &c.

REPORT OF THE PUBLIC SCHOOLS OF MARYLAND, 1882. This is a report of the Secretary of the Board of Education to Governor Hamilton. Mr. M. A. Newell, the author, has displayed his usual industry in summarizing all the facts connected with public education in the State of Maryland.

We are in receipt of the current number of "TRAVEL," a monthly magazine for the use of travelers, published at 162 Broadway, New York, by the American Exchange in Europe (Limited), of which Senator Joseph R. Hawley is President, and Henry F. Gillig, General Manager. It is an elegant and most effective publication. The cover and the laborate maps are the best work of the kind, and the text is of equal excellence. It contains all sorts of interesting and valuable notes for travelers; information about manners and customs, and a large number of skeleton routes in Europe. It is edited by C. A. Barattini, the experienced traveler and manager.

HAND BOOK OF TENNESSEE.—By A. W. Hawkins, Esq., Commissioner of Agriculture, &c., Nashville, Tenn., is a well prepared digest of the resources of that State, showing the many inducements it offers to investment of capital and settlement by immigrants.

THE 3RD BI-ENNIAL REPORT OF THE KANSAS STATE BOARD OF AGRICULTURE just received. It is a volume of over 700 pages filled with interesting information and statistics, and well illustrated with colored maps of the State, and of each county in the State separately. It is valuable to the citizen of the State and all who desire to become such or who wish to know all about the resources of that growing and important far-west State of the Union.

THE AMERICAN TROTTING HORSE; Why he is and What he is. Also, "The Evolution of the American Trotting-Horse" Are two well prepared papers on these subjects, which do much credit to the author, Prof Wm H. Brewer, of Scientific School at New Haven, Conn.

Mr. Wm. O. Bailey's Report to the Signal Service Department on Michigan Forest Fires.

Report to the 1st of March, 1883, of the BALTIMORE EYE, EAR AND THROAT CHARITY HOSPITAL of Baltimore City, supported by voluntary subscriptions, is received, from which we learn that this grand charity is in a prosperous and flourishing condition. A nobler work has never been started by the ladies of Baltimore to benefit indigent persons afflicted by either complaint named. The ladies have struck the key-note this time by having for its officers and chief-managers the most prominent gentlemen of the State, or their wives, as *officials* in the conduct of this admirable institution for the relief of the poor of the city and the State, and also for all such as are able to pay for relief from diseases affecting either of these important organs. The ablest Professors of these departments of medical science are always on hand, and the tenderest treatment with necessary accommodations await the visit of every sufferer! It is the one grand institution of charity that our city can boast of when comparing her appliances of "Christian Charity" with other cities, either in this or any other country.

Sixth Annual Meeting of the Dutch Friesian Association of America, with transactions and addresses for the year 1883.

Report of observations on the Rocky Mountain Locust and the Chinch Bug, by Prof. C. V. Riley, of the U. S. Dept. of Agl.

Report of the Professor of Agriculture and Superintendent of the Farm, for two years ending September 1882, of Michigan State Agricultural College. This is an excellent report, showing much care, industry and practical utility in the experiments made.

SUGAR CANE GROWERS—See the advertisement of the Blymyer Manufacturing Co., of Cincinnati in our columns this month. This well-known Company offers all kinds and sizes of Cane Mills and Sugar Evaporators, including a new evaporator called the "Automatic Cook," for which special excellence is claimed.

## Journalistic.

THE AMERICAN FARMER, published by E. A. K. Hackett, 107 Calhoun street, Fort Wayne, Indiana, is an excellent agricultural monthly. The quotations from its valuable columns by other first class journals, evidences its worthy estimation by its contemporaries. While they give it credit they should also give its place of publication.

THE BIOGRAPHER—is a neat quarto-monthly of 64 pages, just commenced, devoted to biography, consisting of short sketches of eminent persons of all nations, at present attracting public attention. Each sketch is illustrated with a life-like portrait, etched or engraved on wood. This work not only fills a void in current literature, but is full of information in regard to the personal history of each leading man and woman of the day. This first number contains notices of thirty-four prominent individuals, with 32 portraits. Published at 23 Park Row, New York, at 25 cents, single copies; \$2 50 per year.

## Catalogues Received.

From Mr. D. H. Wheeler, Secretary of State Board of Agriculture, Plattsmouth, Neb. List of premiums of Nebraska State Fair, to be held at Omaha, Neb., September 10, 1883, and continue six days.

The St. Clair Mineral Spring, Michigan.—An illustrated and well written account of this new medicinal resort of the West.

## LIVE STOCK REGISTER.

### A Word about Dogs.

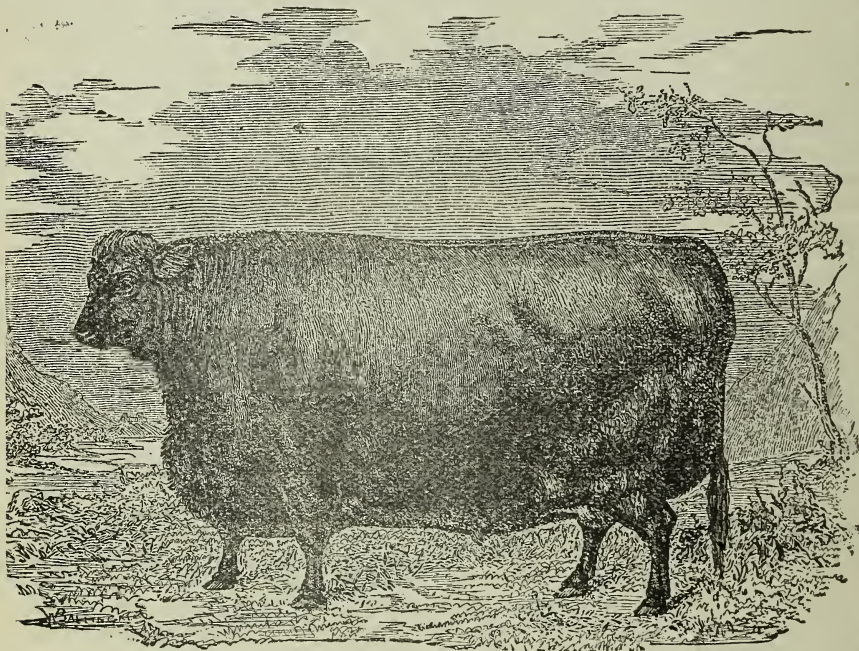
If the farmers of the country who own worthless dogs, curs without any breeding, could be induced to destroy them and substitute one well bred shepherd pup, not more, to each farm, the wealth of every farming community would be vastly increased in many ways. Farmers, with a little tact in getting along with a dog, would soon find the collie saving them many a step. Eager and anxious to learn, willing to do everything within his power, the young dog needs only a wise and patient restraint to become the most useful hand on the place. The collie is an alert and



discriminative watch dog, answering for this purpose far better than the heavy, sleeping, stupid, savage bull or mastiff, who is liable to attack his best friends or eat up a child. As a collie acquires age and dignity, if he has been well taught, he imagines that the whole business of the farm hinges upon the performance of his duties and he becomes as punctual and regular as the sun. Canine companionship, if at liberty, has a bad effect upon the collie in most instances. Where an old and wise dog is used to tutor youngsters by good

**Great Sale of Jersey Cattle at New York.  
May 9th.**

The King of Ashantee sold for \$6,500, the largest sum ever paid at auction. The buyer is C. Easthoter, of Niles, Ohio; Butter-maker brought \$1,025, paid by T. S. Stephens, of Swansea, Mass.; Fancy Alpha was sold for \$1 650, to F. S. Cooper, of Coopersburg, Pa.; Countess Fawks for \$1,000 to C. Easthofe; the colts, La Biche \$1,900 to Theodore A. Havemeyer; Starlight Maid, \$1,500 to C. Easthofe. Sixty-one animals were sold, netting \$30,080.



PRIZE ABERDEEN-ANGUS OX, (At Paris Exhibition, 1878.)

example while at work, it will do to have two or more together. The duties of the collie are practical, and mean work; companionship means play and is demoralizing. Especially is this true of companionship with a hunting dog. The shepherd dog has enormous percepts and is very imitative; he quickly goes wild over game when led by a hunting, consequently neglects his work, and is spoiled.—*Breeders' Gazette, Chicago.*

**Wells' "Rough on Corns."**

Ask for Wells' "Rough on Corns." 15c. Quick, complete, permanent cure. Corns, warts, bunions.

**The Paris Prize Ox.**

At the Paris Exposition of 1878 the grand prize of honor for foreign cattle was awarded to the group owned by W. McCombie, Tillyfour, Scotland. The Agricultural Society of France also offered a prize of 2,500 francs for the best group of beef producing cattle in the whole exposition, all the members of the different juries acting together in making the award. This prize was won by the same herd of polled cattle. The ox represented by the cut on this page was one of McCombie's group. He is a wonder in his way, and in form and style is a model beef animal.



For the Maryland Farmer.

**Hampshire and Shropshire Downs.**

BY J. W. DARROW

The Hampshire downs are a cross between the pure Southdowns and the common sheep of Hampshire, England. In some parts of England, the Hampshire downs have almost, if not quite displaced the Southdowns. The former are an excellent breed for crossing with the long woolled sheep, the wool being longer and somewhat coarser than that of the Southdowns and their fleece weighs from six to seven pounds, which makes them profitable as wool producers. Lambs as a general thing are dropped early in the season so that they may be turned upon the market at an early age, or if kept over until the following spring may be made to weigh a hundred pounds. This breed is becoming much more popular with sheep-raisers of this country, and its popularity is certainly deserved.

The Shropshire downs' ancestry is not so definitely traceable, but probably the Cotswolds, Leicesters, Southdowns and natives of the Shropshire district in England, all had a share in producing the Shropshire breed. It may be said that this breed was produced from a desire to get a good mutton sheep to supply the coal and iron districts of Shropshire, England, with meat food. The early crosses differ much from the present Shropshire herd, their carcasses scarcely going beyond 50 or 60 pounds, while now they are made to weigh when two years old, from 100 to 120 pounds, and the fleece six or seven. Hence, as a mutton and wool sheep they are among the best. Combined with this they have a hardy constitution which makes them especially desirable for our colder climates. We are glad to note that these two breeds are much oftener found in our American flocks than they were a few years ago. They deserve a permanent place there.

Charheim, N. Y.

**FINE JERSEY CATTLE AT AUCTION**—At the semi-annual sale in New York, May 17th, of imported Jersey cattle belonging to T. S. Cooper, of Coopersburg, Pa. Mr. Samuel M. Shoemaker, of Baltimore, bought the cow "St. Clementine" for \$2,600. The cow "Distaff" brought \$1,500; "Daisy of St. Peters," \$2,150; "Miss Ogden," \$610. In all 61 animals brought \$43,765.

**Devon Cows for Butter.**

We have been looking over reports of what Devon cows have just been doing in the butter line among us, and find that 19 of the cows have been producing from 15 to 20 lbs. 5 oz., each, of best quality of butter per week. Considering their medium size and economy of keep, these are great yields; but in years gone by there are records of still larger yields, nearly equalling those of the famous Jerseys of the present day. The Devons, however, not only excel in the dairy, but in several other respects. They are very superior as working oxen, have a quicker step and greater endurance than any other breed, and are the most powerful of all for their size. When fattened, they turn out a choice quality of beef. Thus we see that they are a most excellent *general purpose* breed, good in the dairy, for work, or in the shambles. The only other cattle that can be compared to them in uniting so many superior qualities are the Red Polled Norfolk and Suffolk, which, in fact, are hornless Devons.

The Devons have been much neglected by the public for 20 years or so past, both in England and in America; but attention is now awakening to their great merits, and we have no doubt they will soon come into as high favor again as formerly; for aside from their polled congeners, no cattle are so profitably bred and raised on light pastures, and hilly, rocky districts.

At a public sale of eighty-six lots of Devons, the past year in England, they averaged \$180 each. One of these cows sold for \$625, and a bull for \$875, while a calf brought 50 guineas, (\$250.) These are about 25 per cent. higher prices than the average of any herd of either Guernsey, Jersey or Ayrshire cattle sold for in England in the year 1882. We can learn from this the appreciation of Devons in their own native land.—*American Agriculturist*.

**Almost Incredible.**

A \$95 24-stop organ for only \$49 75. This offer is made by Mayor Beatty, of Washington, N. J. He has the largest and most complete factory in America. This offer must be accepted on or before 15 days after date of this paper; after that date the price will be \$95; therefore, do not hesitate but order at once. Every instrument guaranteed or money will be refunded with interest.

### Maryland Horticultural Society.

We were compelled by circumstances from attending the April show of this Society, but are pleased that in our absence, a friend has given us his report of the proceedings. We have always taken great interest in this Society, as this journal was its chief originator, and our proprietor—Mr. Ezra Whitman—its first President.

"The show was exceptionally fine and it was pleasant to observe that new blood has been infused into it. The collection of Mr. T. Harrison Garrett (a new exhibitor,) does him great credit as it was not surpassed by any in the hall, as the numerous premium cards evinced. The attendance was large and the interest taken reminded one of the exhibitions of some years ago. The society has certainly increased the horticultural tastes of our citizens, shown, not only in the numerous new and rare plants here exhibited, but in the decoration of our public squares and grounds.

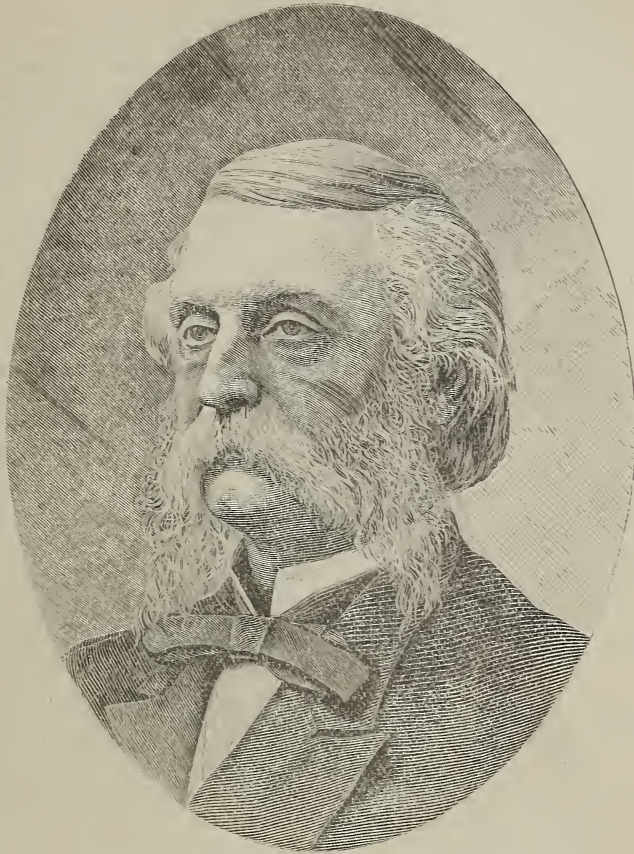
On this occasion President Perot delegated the duty of presiding to the treasurer of the society. The meeting of the society was called to order in the adjoining cafe, and all were more than pleased to see our old horticultural friend, Mr. R. W. L. Rasin presiding, reminding us again of old times when he so nobly seconded the first president, as the treasurer of the society, a post he has held from the first formation of the society, and to none is more credit due for its continued success. On taking the chair Mr. Rasin called attention to the liberal special premiums that had been offered by the Messrs. Garrett and others, and to the fact, no matter how limited the space, and condition of life of the individual who was blessed with horticultural tastes, they could be indulged in on the amateur's table. In this exhibition, itself, will be found a geranium 3 feet high, grown in a window of a barber on Light street, whilst on each side are seen two beautiful ivies on trellises some 18 inches wide and 2 feet high, grown in places where the rays of the sun never reach. Excellent specimens of palms, begonias, cactus, roses, fuchias, etc., and he could not too highly commend the liberality of Mr. Garrett in bringing this beautiful display before our citizens, by offering a list of special prem-

iums for winter gardening. He said further that it had been found from experience that the lectures delivered and essays read before the society, from their length and numerous botanical names of plants referred to, made it impossible for the audience to remember. They had therefore decided to have them printed in future and sent with the premium list to the members and distributed at the meetings of the society, so that they could at all times be used for reference. He was sorry to announce that Mr. Halliday, on account of indisposition would be unable to read his paper, and he would therefore request the Secretary to do so. The instructive and practical essay of Mr. Robert J. Halliday was received by the intelligent audience with marks of warm approbation."

The society then adjourned.

CANNED DEVILLED CRABS:—This method of preserving this delicious shell fish is among the late industries along the water courses where they are found in such numbers as to attract capital and enterprise. They are packed in cans in great quantity in this State and Virginia. The Messrs. McMenamin & Co., have a large establishment at Hampton, Va, and have become justly celebrated for their canned crab meat and devilled crabs. We ate some of them last Christmas at the Green House in this city, and found them as sweet and toothsome as if just out of the water in crab season. We are just now reminded of them again by the presentation of some cans from Mr. Louis Giese, their agent in this city, and find them truly delicious. Mr. Giese is a general merchandise broker at 59 Exchange Place, but makes specialties of cans, canned goods, cement, &c. By ordering from Mr. Giese, persons in the country and towns away from the home of the crab, can have them all the year, as fresh and nice as if just caught, and at a price almost as low as they sell for in the market during summer. This is a great blessing to those who delight in this delicious food, and they should avail themselves of the opportunity here offered.





J. R. DODGE, M. A..

STATISTICIAN OF THE DEPARTMENT OF AGRICULTURE.

Through the courteous kindness of Mr. Lee Crandell, manager of that capital weekly—*The National Farmer*—of Washington city, D. C., we are enabled to present to our readers the excellent picture of the man who has long labored in the cause of the agricultural interest; whose name has become familiar to every careful reading farmer and merchant in the land, and whose work during a long series of years has been looked to with interest and high appreciation by the statisticians of Europe, as well as all dealers in United States products and exports throughout Christendom. We are indebted also to the *National Farmer* for the following brief sketch of Mr. Dodge, that accompanied his likeness in that journal of the 10th of May, 1883.

"The Statistician of the Department of Agriculture, Mr. J. R. Dodge, entered upon the service of the department in July, 1862, upon its organization, and was engaged for four years in writing and editing the reports, and in May, 1866, assumed charge of the statistical division, still remaining editor of the "Annual." He has filled the position of statistician until the



present time, with the exception of three years in special statistical service of the Treasury and Interior Departments. In the latter he was special agent of the tenth census for the collection of statistics of agriculture, returning to his former position in the Department of Agriculture, in November, 1881, but continuing his investigation for the census, and the preparation of special reports upon sheep husbandry, orchard fruits, tobacco, hops, etc.

"For fifteen years he wrote, as is well known, the larger part of all original matter prepared for publication in the department, and revised and edited all its publications. In this time more than three million copies of the "Annual" were printed by order of Congress, and a larger number of statistical reports. In 1873 he made a report of the 'Sheep and Wool of the World,' being one of the Vienna Exhibition reports made to the State Department as an honorary commissioner. During the same season, under a commission for the Department of Agriculture, he investigated the official statistical system of the departments of agriculture of the principal European governments, and arranged for exchanges of official publications, looking to co-operation and a tendency to unification of methods and aims in agricultural statistics.

"As a statistician, he has evidently realized the absolute necessity for accurate interpretation of returns in a country continental in extent, of knowing intimately the soil, climate, crop specialties, labor conditions, and peculiarities in rural economy of every locality from which reports can come. With an intimate knowledge of the local condition of agriculture, the regular reports of two thousand counties may have an interpretation that will not misrepresent and stultify their meaning. With remarkable opportunities for such study and a quick perception of salient points of observation he has personally examined prevalent methods in all departments of rural husbandry in nearly every State and Territory of the United States.

"In preparation for this work, after a youth in New England, (he is a native of Southern New Hampshire,) spent in obtaining an education, academical and technical, including the art of printing, he went South, remaining five years in Mississippi, taking charge of an academy and incidentally

occupied in journalism, in the meantime studying closely the agricultural system of which cotton is the chief cornerstone. Returning, five years were spent in Nashua, New Hampshire, and seven in Ohio, in the midst of the agriculture of the great Central Basin, editing an agricultural paper, the *American Ruralist*, an eight-page journal, published in Springfield, Ohio, and circulating East and South, as well as West, at the commencement of the civil war. He was also editor of the *Daily Telegram*, which, in 1861, was merged into the *Springfield Republic*, a paper that still occupies an influential position in Ohio journalism.

"In the long session of 1861-2, Mr. Dodge was Senate reporter for the *Republican*, and also for the old *National Intelligencer*, while Colonel Seaton was still its editor. For four years subsequently he was connected with the New York Associated Press and also with the Department of Agriculture, as editor, until acceptance of the position of statistician, with its burden of responsibilities, precluding all other literary or journalistic work.

"In the early days of the division of statistics the clerical force was small, not exceeding half a dozen persons. The rural industries were developing in volume and extending in territory. Reporters were inexperienced, with many districts unrepresented. There was much modification and correction necessary, calling for rare judgment and wide knowledge of local conditions; yet the work was so well done by the statistician, that in 1870, when the crucial test of the census was applied, the general agreement of census and estimates increased the public confidence in the substantial accuracy and growing importance of the work.

"In cotton and corn the results, while differing slightly from the census, were on the side of greater completeness and nearer the truth of real production, as proved by the facts of commercial distribution. While not infallible, it is shown that in the hands of a competent statistician, this system may produce results positively superior to those of an incomplete census.

"The confidence and assumption of the amateur crop statistician, a genus that is swarming at present, illustrates well the adage: 'Fools rush in where angels fear to tread.' It is evident that local data for

statistical estimates are edge tools, dangerous for most people to handle. But Mr. Dodge happens to be endowed with an intuitive perception of their values and uses their limitations and inaccuracies, and to be able, with sufficient elaboration, to test their accuracy and obtain their pith and essence. The power of rapid and accurate generalization in these matters is invaluable, but will not suffice to present clearly the truth, without a thorough and accurate previous knowledge of the capabilities, peculiarities and agricultural conditions and tendencies of every part of our broad domain. In this lies largely the secret of the success of the present statistician of the Department of Agriculture.

"The duties of the office are wide as the fields of agriculture, and the processes and practices which they illustrate, and not merely confined to current crop reporting. That feature involves an organization of two thousand reporters, each representing a county, with about six thousand assistants. Returns are made on the first day of each month, each covering the producing areas of a country, and the acreages deduced are modified in accordance with the respective crop areas and capacity for production of the counties. It will be readily seen that the average of a thousand reports, each of which represents only the crop of an individual, as at best the extent of his personal observation, is unreliable. The acreage which each report covers is the most important element in the calculation.

"Besides these correspondents there are State agents charged with supplementing and perfecting the work of correspondents, and recently a statistical agent in London, has taken the European field to report upon prospects and results of such products as feel most the competition of American products.

"The public interest and confidence in the work of this division is rapidly increasing. The accuracy of last season's estimates of corn, wheat and cotton, have especially contributed to this result."

SOOT is quick in its action without being too stimulating, and makes an elegant top dressing for spring grain and grass. It will destroy slugs on winter grain.

## LADIES' DEPARTMENT.

### Chats with the Ladies for June.

BY PATUXENT PLANTER.

#### JUNE.

- "Filled with sweetness, rich completeness,  
Flowing wine of ruby days,  
June the matchless, June the peerless  
Crowns the year with diamond rays.
- "Rarest gem in Nature's setting,  
Pure as pearl in ocean hold;  
Golden rim of sunlight falling  
Girds thee close in fretted mold.
- "Fancy lingers near the portal  
Where the changing months appear.  
Touching each with magic pencil,  
Witching priestess of the year.
- "Yet the June month is her darling,  
And a robe of fairy sheen  
Folds the dainty, graceful being  
With the halo of a queen.
- "Glowing gifts and shining treasure  
Doth the royal hand bestow,  
Boons unstinted, without measure,  
In a thousand channels flow.
- "Wealth of bloom and leafing perfect,  
Now the waiting world endow;  
Sounds in tone of every insect,  
Summer's crown is on her brow."
- "Roses blush with hearts of crimson,  
Tintings rare that shells illumine,  
Bend with purest buds that whiten;  
Censors sweet, the air perfume.
- "Stretching wide toward the altar  
Where the Holy loth abide,  
Winds the nave that like no other  
God hath made: his own June-tide.
- "Thoughts like weary pilgrims hasten  
O'er the rich Mosaic way,  
Seeking freely offered pardon  
For the error through life's day."

In this first summer month—leafy, rosy June, which wins so lovingly the heart of every rural florist and searcher after botanical truths, it is deemed not inappropriate to resume the subject of "Higher education for Females," alluded to in our last talk. In the first place let me express delight that the tendency of the age is toward a more liberal development of the mental capacity of our women, in fostering higher grades of seminaries of learning for females, and the admission of such as students, who have devoted their lives to the sciences and abstract studies, like medicine, law and literature, to those classic temples heretofore reserved to men exclusively. It seems now to be admitted that woman exercises by her presence the most wholesome influences upon students of the rougher character. Women by their companionship refine and elevate grosser natures, and in her presence, and with her rivalry all are stimulated to greater exertion to win the golden prize of public esteem and favor. Now, that the avenues to fortune and favor are no long-

er closed or impeded, what may we not expect from womanly efforts, judging from the past, and recognizing her occasionally exceptional triumphs over all the impediments which society has for a long time placed in her way, with a sort of fiendish ingenuity becoming only the untutored savage of the untilled wilderness

How woman, under these adverse circumstances, could have accomplished as much as her history proves in the last three centuries is a wonder and a mystery. We find her the surest, yet all powerful, ruler of nations through her male lovers, and we have now as Queen of England, a noble woman, whose admirable qualities command more love and esteem from her subjects than any male ruler could possibly command. In the arts we need only name Rosa Bonheur, the inimitable portrayer of animals on canvas. In literature she holds an enviable distinction. She has shown herself proficient in the sciences; and as an inventor, Mrs. M. J. Gage, in the *North American Review*, has, in an eloquent defense of the rights of her sisters, shown that to women we owe the invention and ornamentation of pottery, the fabrication of silk, gauze, lace and the Cashmere shawl, engraving on wood, and the extraction of that sweetest of all perfumes, the attar of roses, in the days of old. Since then, it is very significant that a woman invented the first cotton gin, although a man obtained the credit of it, and the first straw bonnet, whilst in the list of more complex mechanisms, she is represented by the Burden horse-shoe machine—which saved \$32,000,000 in the first fourteen years of its use, a mower and reaper, the paper pail, the gimlet pointed screw, an improved spinning machine, a rotary loom, a voltaic smelting furnace, a wood sawing machine, a chain elevator, a deep-sea telescope, a machine for making satchel bottom paper bags, (the inventor was offered \$50,000 for the patent,) and many other equally valuable and novel appliances.

And to this we would add that a lady of this city has invented the most sensible and practical *Fire-Escape* that has ever been presented to the public consideration, which has been well tested and received the entire approval of the fire department of Baltimore city. In journalism, our records of early date show women editing some of the best newspapers of that day in this country, while to-day Mrs. Leslie, of Southern birth, is the chief manager and comptroller of the *Leslie Journals* of New York city, that take rank with the best monthlies published in that home

of literature and the arts.

If woman has done all this, hampered as she has been, what, I again ask, may we expect of her, now that these obstructions to her manifestations of genius, and her practical usefulness in contributing to the advancement of the human race have been, to a great degree removed, and she is allowed to enjoy the privileges of the great schools of learning, on an equal footing with her brothers, and enjoy solely the benefits of her labor under the laws of nearly all enlightened States of this Union at least, and also of some of the most enlightened nations of Europe.

While we rejoice that this inglorious ban has been slowly dissolving, we do not desire to see any but such as are competent and have an unconquerable ambition to excel in some particular line of study, claim their right under this ameliorating change from stern seclusion to partial participation with man in the enjoyment of drinking at the same pure fountains of wisdom and science. No, we are ungallant enough to say for the good of womankind, that all the study in the world will not make some women other than mere contributors to the likes and dislikes—the animal pleasures of man's appetite and humors, and all such, often lovely, sisters, should not enter the portals of science where angels often fear to tread, but should have an education such as will fit them to go through life with honor to themselves and happiness to any household that they may become a member of. Such, and of such, there is a large majority of the sex, should have a higher education than is now provided for all such. An education that will fit them to become sensible matrons, notable housekeepers and true mothers, capable of making home a loved resort for husband and the dearest place on earth for the children, that they all in after life, when she—the real cause—shall have gone to her eternal reward, may collectively and singly, with heartfelt truth, wherever they may be, exclaim—"Home! sweet home!" their memories ever returning with lingering fondness to the pleasures of life at their old nest, "when mother did this; said this; and had so and so." Let our girls in the mass be so educated as to fit them so well for the duties of housekeeping and making home a paradise, that their husbands and children will love home better than all other places on earth. Those who are gifted and desire fame more than love—of which there may be a few and far between—can now enter the portals of the temple of learning and reap the advantages if they choose, but let



all others be educated so that they be fitted to adorn the station of mothers of families and be responsible for a future race of honest, brave sons and virtuous daughters, that will strengthen and glorify by their virtue, their nation.

### Our Visit to Harford.

By invitation of A. M. Fulford, Esq., we attended the meeting of the Deer Creek Farmers Club, at his house, on Saturday, May 19th. For the first time, I passed over the Narrow Gauge R. R., from Baltimore to Fallston, and from there by stage 4 miles to Bel Air. This route passes through Long-Green Valley, noted as one of the richest and most beautiful valleys in the State. Near to the road are the splendid farms and fine residences of Messrs. Samuel Hyde, P. T. George, Ed. Jenkins, Geo. H. Williams, and many others of like celebrity. After leaving this valley the country becomes rugged but romantic with its high hills, valleys, streams, forests, &c., all of which reminded me of the great dairy localities in the State of New York and in New England, and I cannot see why cheese factories and creameries would not be as profitable as in Oneida and Herkimer counties, N. Y., and in Kennebeck county, Maine. Climate, soil, situations and all the surroundings, with nearness to large markets, seem to me very favorable to such enterprises.

At Bel Air, many old acquaintances were met and time passed in these interviews, until Mr. Fulford arrived and took me in his private carriage behind a fine team, to his elegant old homestead, one mile from the town, where I spent the balance of the day and night, with as much pleasure and interest as I have ever enjoyed in the same space of time. The mansion of imported English brick was built one hundred and fifty years ago, and to-day is standing firm, in good condition and from appearances will stand hundreds of years to come. The main building is about 30x50 feet to which

additions have been made since its erection. The parlor contains more than thirty valuable family portraits going back for several generations. A likeness of the great-grandmother of Mr. Fulford hangs on the wall; she, with her husband, when the British entered Boston at the beginning of the Revolution, left New England and located in Maryland. There are many other interesting paintings, and each has its own entertaining history.

The farm, which contains about 130 acres, mostly cultivated in wheat, corn and rye, with pasture alternated, has on it a great variety of out-buildings, among which is a barn over 100 feet long; feed house containing steam engine and boiler for cooking feed, &c.; ice and spring houses and a large number of pig and chicken houses, also one stone house 20x50 feet in which is a large old-fashioned cider mill, which is referred to, that attention be directed to the care taken of implements on this place. The horse-power which drives the cider mill is one I made and sold 40 years ago, and is now in as good working order as when first made. It gave me great pleasure to recognize this old acquaintance.

The garden has been on the same spot for 50 years and contains  $\frac{1}{2}$  of an acre and could not be better arranged for use and effect. As to the stock, it would take a whole number of the Maryland Farmer to describe the many heads and the excellence of each, and as we learn Mr. Fulford is getting up a full descriptive catalogue of the same, I will await its publication and refer my readers to it. Suffice it for me to say that the Berkshire hogs are the commanding stock on this farm. They occupy 8 or 10 acres, divided into small lots of two or less acres, dotted all over with small, covered pens, in which lots they are kept winter and summer. The herd consists of several splendid imported breeders, besides his own raising that have taken so many premiums in the different States of the West, the South, and the Middle States. We learned his sales in the past few years have amounted to \$80,000. This is some evidence of the extent of the pig-business

done on this beautiful farm in Harford county. He had 150 when I got there and 17 more I was told were added during the night. The stock of horses, cattle, turkeys, and other poultry were in great abundance and all looking well.

About 4 P. M., the members of the Deer Creek Farmers' Club began to assemble, and in a short time the meeting was called to order and an instructive discussion was began, a report of which follows this, and will be read with interest. After a session of some hours the club adjourned and the company of thirty, members and invited guests, were summoned to the dining hall, where seats and ample room was found for all, profuse prodigality and hearty cheer, flowers, bright lights, old silver and other ornamentations, delicious viands and a superb desert. No first-class city hotel can prepare a better dinner and more elegant entertainment than was there spread before the club and its guests, and is it saying too much to add--herein perhaps may be attributed much of the mysterious popularity of the Deer Creek Farmers' Club.

W.

### The Deer Creek Farmers' Club.

#### PREPARATION FOR HARVEST.

We are greatly indebted to the editor of the *Egis* for an advanced copy of his admirable report of the Deer Creek Farmers' Club, which we give in full:—

"The Deer Creek Farmers' Club met last Saturday at the residence of Mr. Alex. M. Fulford, near Bel Air, Mr. S. B. Silver, President, in the chair. Nearly all the active members were present, together with Messrs. Ezra Whitman, of the *Maryland Farmer*; George L. VanBibber, Col. Herman Stump, G. Smith Norris, J. T. C. Hopkins, A. Preston Gilbert, Henry Fulford and N. N. Nock.

"Before proceeding with the regular business the club, in a body, examined Mr. Fulford's stock, of which Berkshire swine are a specialty. Mr. Fulford's Berkshires are noted far and wide as the finest in the country, a fact which is attested by the large number of premiums he receives at the best fairs of the land. The herd embraces a number of choice animals selected and purchased for him in England by an

agent sent out expressly for that purpose. The rapid growth of some of these swine is remarkable. A lot of about 20, which were only from five to six months old, will weigh from 175 to 250 pounds each. Mr. Fulford has also some excellent registered Jersey and grade cows and fine horses. A thorough-bred brood mare, descended from Lemington and her colt by Administrator were much admired.

"Upon the re-assembling of the club the question announced for discussion was:— 'What preparation should we make for harvest and how can we economize in saving our crops.'

"Mr. Fulford said that since canning has become so general, harvest hands are harder to get, and one of the most important things to be done in the way of preparing for harvest is to secure good hands in time. Another important matter is to get mowers and reapers in good condition. After the last harvest they should have been cleaned, greased and put under cover, so that they would be ready for work by merely grinding a few knives. He has a Champion mower which has been treated in that way, and it has not cost him four cents for repairs. If we will look ahead and attend to little things, we will save time if not money. It is important to be full-handed at harvest. Crops should be saved as soon as they are fit to cut, as their market value is considerably increased thereby. Hay cut in time and properly cured will sell for more money and be better for feeding than if allowed to become over ripe. He also advocated planting corn for forage alongside the pasture fields, in order to provide green food for stock in case of a dry season. He advised farmers to provide themselves with as much labor saving machinery as their crops will justify. Self-binders may be liable to some objections, on hilly ground, but where the land is suitable they may be used to advantage. They might not pay for cutting five or six acres of wheat, but two or three neighbors could buy and use one in common. Hay tedders are also useful and there is no economy in using half worn forks in the harvest field.

"Wm. Webster urged the importance of having harvesting implements and machinery in good condition before they are needed for use. With a small harvest it might not pay to buy new machinery. If

the crop is sufficiently large, a self-binder will pay, because it will save a great deal of trouble and worry about hands. He had used a reaper eleven years at a cost of only \$4 or \$5 for repairs. The secret was that after it was used, it was taken to pieces cleaned and not put together until the next harvest. It is important to know what crops to cut first. Frequently timothy, clover and wheat are all ready for cutting at the same time. He would cut the clover first and before more than half the heads turn brown. Timothy should be cut soon after it comes in bloom. Wheat should not stand too long. There is less shrinkage in the grain if cut before it becomes very ripe.

"Thomas A. Hays thought it important to have corn well worked so as to be prepared for harvest when it comes. Often corn working and harvest come together, and it is therefore important to have plenty of help. It is a good idea to have tools examined, repaired and put away in good order. The gain by the use of good tools is immense.

"James Lee said a farmer should be ahead of his work. The harvesting of of large crops require improved machinery but he doubted the economy of buying a reaper to save 10 or 11 acres of wheat.

"For a large crop he would use a self-binder. To save a crop of hay you need a good mower, a horse rake and a hay tedder. The latter is very important, particularly in a wet harvest, as it will turn hay as fast as 20 men with forks. He let his oats lie in the swath until they are thoroughly cured and hauls them in without shocking.

"Wm. Munnikhuysen also thought a farmer ought to drive his spring work, so as to be in readiness for harvest. He was glad to hear hay tedders so highly recommended, and could supply any of the members who wanted one.

"George L. VanBibber said he did not harvest anything but raspberries and water-melons, and he supposed moonlight nights when there is no big dog about, would be the best time to harvest watermelons.

"Wm. D. Lee said his melons were generally harvested for him.

"John Moores said he was struck with a remark made by Mr. Thomas Lochary, at a former meeting of the club, that the first thing in preparing for harvest was to

see that the roads leading from the field to the barn were repaired and the little bridges and gates in good order. Another suggestion was to keep your hands in a good humor; pay them a good price, willingly and promptly; feed them the best you have and plenty of it. You will then have no trouble getting hands another year. Always be ready for harvest. Have good tools and enough of them and always have a spare fork. There is economy in using a self-binder, even for a medium crop of wheat.

"R. Harris Archer agreed fully with Mr. Moores that harvest hands should be paid and fed well. It requires good management for a farmer to make things come in right during harvest. He had been dealing in hay for 5 or 6 years and was convinced that three-fourths of the hay sent to market was cut too late. It will bring more, and be more satisfactory to buyer and seller if cut earlier. The color and yield are better and the hay weighs heavier when cut earlier. Timothy and wheat harvest generally come together. If a man makes a specialty of hay he should take care of the timothy as the wheat will be less injured by standing.

"Mr. Moores suggested that with a self-binder, neither need be neglected, and the after growth starts better when cut early.

"Mr. Archer would let oats get tolerably ripe, cut them with a side delivery rake machine and put them in bunches.

"Hon. James D. Watters said he recollected when a boy, they used to get ready for harvest by getting a chunk of sandstone and putting rifles in order for sharpening the scythes. Times have changed but the principle is the same. Mr. Lochary's suggestion about mending the roads meant more. It meant looking ahead and putting machinery in order. The time is coming when nearly every farmer will want a self-binder. It gives a farmer control of his harvest by enabling him to cut it down without regard to the help he may have. He did not think there was any disadvantage in letting timothy stand a little while, unless you want to sell it, or have a livery stable, and don't want horses to eat much of it. Horses eat it better, and it is better for them when not cut too early. Machinery ought to be put in order before the hands are collected in the field, and there is no economy in using inferior or worn out



forks. He considered hay tedders of great advantage, and a necessary article to be provided where a heavy crop of hay is to be saved. In preparing to harvest clover he thought it would be a good plan to have a lot of canvas caps ready for covering the hay cocks. He would put the hay in large cocks, cover with canvas, let it stand a few days and then haul it in.

"R. John Rogers agreed with Mr. Hays that an important part of the preparation is to get the corn laid by before harvest. He had not as high an opinion of the utility of the self-binder as some members. Few men are found on a farm who are competent to keep one in order, and being liable to get out of order, they may cause detention in the harvest field. Until they are simplified he did not think they would answer for general use. He was, however, in favor of using the ordinary reaper, and would have one if he only had ten acres to cut. He had found a horse-power hay fork a great labor-saving implement in housing hay in a barn, and hence the importance of erecting buildings adapted to their use, although they can be used in almost any building. Hay tedders are also valuable in the harvest field. Timothy should be cut when the bloom is fully shed, and before the blossom begins to turn brown. Stock will eat it better than if allowed to stand longer.

"George E. Silver thought the question of preparing for harvest could be confined to wheat and hay alone, or be widened to take in all a farmer's business. It is very important to look ahead and have things ready for use. Work can be done quicker, better and more economically by having things ready when needed. He did not think it expedient to engage extra help too long ahead on account of the uncertainty of getting the hands after you engage them. Crops may be damaged by standing after they are ready to be cut, and the great point therefore is, to be ready to do a thing and do it just when it ought to be done. Each farmer must judge for himself as to what machinery he needs. He was a little afraid of self-binders, and he would prefer to wait until further improvements were made in them. Then, and not till then, will they be practicable for farmers generally to handle. Mr. Fulford had made a good point when he said there was no economy in working with half worn machinery.

He also thought farmers erred in buying so many different kinds of machines, but if more of the same kind were used, castings and repairs could be more readily procured in the county. A horse hay fork is useful in saving labor and muscle. A similar instrument is made for hoisting fodder in barns. New buildings should be adapted for using the hay fork and fodder reel.

"Bennett H. Barnes was satisfied self-binders will pay for even 15 acres of wheat. Two men and a self-binder can cut and shock that number of acres in a day. The most of us cut hay too late to weigh well and be bright. Hay will sell better if cut early. Wheat, also, will be fuller, brighter and weigh heavier when cut a little green.

"Mr. Ezra Whitman, of the *Maryland Farmer*, told how hay was cut and saved when he was a boy—some 50 or 60 years ago. Farmers may have been wrong then and he would not undertake to instruct so intelligent and experienced a body of farmers as the Deer Creek Farmers' Club. When he was a boy no more grass was cut than could be raked up in windrows and put in cocks before night. The men cut it with scythes and the boys spread it to dry. It was then raked into windrows and put in cocks as compactly as possible. The next morning, when the dew was off, the cocks were opened. It was found that the hay had gone through a heat or sweat. The boys then spread it out, shaking it thoroughly and the same day it was ready to haul in. While the boys were doing this the men were putting what was cut that day into cocks, or hauling in what was cut the day before. Sometimes, when too much was cut they would work until nine o'clock, at night, it being deemed very injurious to the hay not to get it into cocks the day it was cut. It then came out of the mow, bright and free from dust, and the stock ate it clean. The rule was to cut clover and timothy before the heads began to turn brown. They had no mowing machines, tedders or horse pitch-forks, but cut with scythes and turned it over with forks. Those days have gone by, and he rejoiced to see the great improvements made in farm machinery. When he was a boy he worked with his father, in 1824, on the first reaping machine that was ever put into a field. That machine was not a success but others followed it and worked

successfully. The great feature, which his father did not adopt, was the crank motion. No machine without the crank motion has ever been a success. In the Eastern States where making hay is a specialty, hay is still made as it was fifty years ago, by putting it in cocks and allowing it to heat.

S. B. Silver said it was important to have machinery put in thorough repair before harvest comes on. It is well to spend a day after harvest in looking over machinery and replacing or repairing the broken parts. If you do not want to use them again they will sell for a better price. In harvesting he uses three teams and six men. Two men unload in the barn, and one works the hay fork; one drives the loaded teams to the barn and brings back the empty wagons. Two men remain in the field to load. He had in this way housed the wheat from 14 acres in one day.

The discussion being closed, Mr. Webster complimented Mr. Fulford upon his fine stock and the good appearance of his farm. He has, said Mr. Webster, a field of grass that would do credit to Deer Creek.

The Club then adjourned to meet at Judge Watters' on the 16th of June. Subject—"Farm Ruts: their use and abuse."

[We ask attention to the foregoing report of the proceedings of this club, composed as it is of practical farmers. The suggestions are all excellent and can, with much profit, be followed by all who are engaged in farming. This interchange of sentiment and honest expression of individual reasons for pursuing particular systems, is what makes such neighborhood clubs so important and tend to wonderful advancement in all things pertaining to agriculture. If it were possible to have similar neighborhood or even county associations for consultation and united action all over the State, "My Maryland" would soon blossom as a rose and be an oasis in the desert waste of the old middle States of the sea side.—EDS. MD. FAR.]

It is easier to grow rhubarb from the seed than to get old roots, as these seldom give satisfaction.

White clover generally springs up where bones are applied on old pastures.

#### Short Horns Sold to Talbot Stock Breeders.

Edward B. Emory, Esq., of "Poplar Grove" Stock Farm, sold May 15th ult. to Clarence Levering, Esq., residing near Easton, Talbot county, the following Short-Horn animals of his own breeding: b. c. Mary's Kirklevington Prince, \$150, h. c. Victoria E. 2d, \$200, h. c. Catherine Princess, \$300, h. c. Geneva Rose 2d, \$400. Mr. Levering purchased these natives of Queen Anne's after visiting the cattle ranches of the West where all strains are bred, and inspecting the Hereford breeds of Col. Edward Lloyd and others of Talbot, who raise extensively Herefords.—Nearly all the bull calves raised at "Poplar Grove" have been disposed of, Queen Anne's farmers taking a goodly number. We are pleased to notice this appreciation of our local stock breeders and farmers of Mr. Emory's efforts to improve the stock of the county and make "Poplar Grove" an important Short-Horn nursery of the country.

Mr. Emory, on the same day, made sale of the following young Berkshires to L. R. Levering, Esq., also of Talbot county, at \$35 each: Lord of East Ostwell, Choptank 1st, Rose of Poplar Grove 1st, Belladonna of Poplar Grove 1st and 2nd. This choice breed still holds its own against all other breeds. They are particularly nice for hams, and while they grow to enormous weights, they can be fattened at any age. Mr. Levering seems to have been struck with these good qualities of the Berkshire breed.—*Centreville Record*.

GREAT FIGURES FOR THOROUGHBRED YEARLINGS.—The sale of thoroughbred yearlings at Mr. Swigert's Elmendorf stud farm, near Lexington, Ky, Saturday, was attended by representatives of most of the leading racing stables in the country, and it was one of the grandest sales ever held in the United States. The 23 colts brought \$33,600, an average of \$1,460.87; and 21 fillies, \$13,530, an average of \$644.28. The grand average was \$1,071.13. Some of the leading figures realized, and the purchasers were: Bay colt by Virgil, bought by Dwyer Brothers, \$5,100; bay colt by Glenelg, A. J. Cassatt, \$3,700; bay colt by Glenelg, S. D. Bruce, \$3,000; chestnut colt by Monarchist, S. D. Bruce, \$2,500;



bay colt by Virgil, Dwyer Brothers, \$2,000; bay colt by Virgil, J. E. Kelly, \$2,450; brown colt by Monarchist, Dwyer Bros., \$2,000; bay colt by Glenelg, J. E. Kelly, \$1,850; bay colt by Virgil, Dwyer Bros., \$1,550; chestnut colt by Glenelg, J. E. Kelly, \$1,800; chestnut colt by Glenelg, J. G. Nelson, \$1,150; black colt by Virgil, Dwyer Brothers, \$1,100; chestnut colt by Glenelg, \$1,000; brown filly by Virgil, A. J. Cassatt, \$2,200; bay filly by Glenelg, J. E. Kelly, \$2,500; bay filly by Virgil, S. D. Bruce, \$1,150.

**IMMENSE SALES OF JERSEYS, AT NEW YORK.**—The first day's sale amounted to \$717.46 a head. The second day's sale resulted in the sale of fifty-eight head, which brought \$69,685, an average of \$1,200.08 each, which exceeds by \$438 per head, any preceding average for an entire day's catalogue. The Pedro blood seemed to increase the sales immensely. Mr. Cooper, it is believed paid \$10,000 for Pedro. At this sale Khedive's Primrose, bred to Pedro, was bought by Mr. S. M. Shoemaker, of Baltimore, Md., for \$5,150, the highest price ever paid in this country or any other for any one cow. Elsewhere in this number, Mr. S. is credited with the purchase of a cow, at a late auction for \$2,600. He has, to-day, cows that have sold for far higher prices than any cows now owned in the State. Maryland now owns more high priced Jersey cattle than any other State in the Union. Where will the limit of this breed of stock stop in price?

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